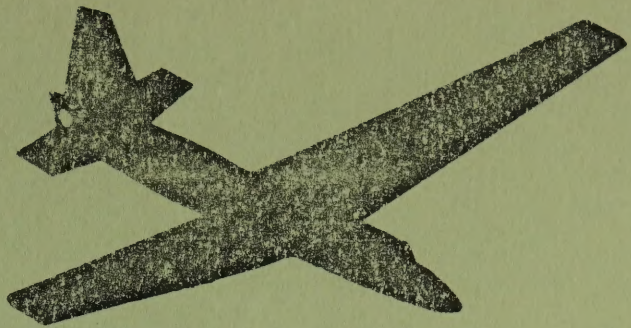


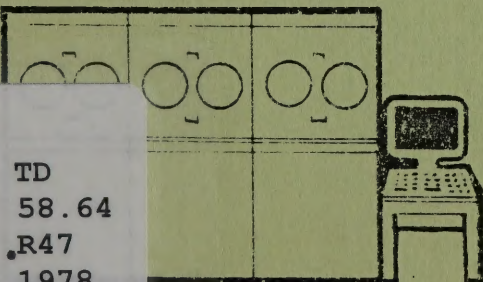
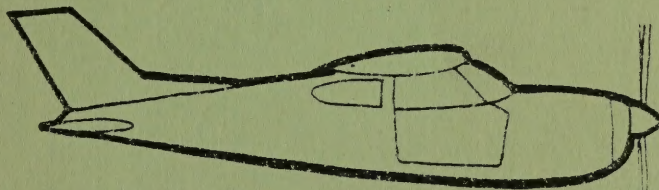


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PHASE I DRD

Unit Resource Analysis



TD
58.64
.R47
1978



User
Requirement
Specifications

Watershed

(HIGH PRIORITY)

#18456678

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TD
58.64
R47
1978

PREFACE

The User Requirement Specifications contain the high priority requirements of the Watershed Management Information System defined during the Detailed Requirements Definitions (DRD) Study, Phase I, of the BLM Strategic Plan as identified in the October-December 1977 field review. They represent the first increment for the design phase of the Watershed Management Information System - an initial summary of the user's requirements within the Resource Inventory - URA framework. This document is not a design document of the automated system itself.

Contents of the package include the Executive Summary (I), Problem Statement (II), Environment (III), and Watershed Information Requirements (V). Sections I, II and III are primarily narrative while Section V is devoted to an information flow diagram and a detailed description of the outputs (B).

A
USER REQUIREMENTS DOCUMENT
OF

HIGH PRIORITY OUTPUTS
FOR A
WATERSHED RESOURCE INVENTORY - URA
INFORMATION SYSTEM

The Information Flow (A) is included in the package listing all high priority inputs and outputs. It is the result of a field review of the initial package and generally which inputs produce which outputs.

Section VB is a detailed description of the high priority Watershed outputs which are grouped by subsystems for soils (1), vegetation/cover (2), air (3), geology (4), and water (5). Each output is described on an output description form which includes the output title, a brief description, proposed usage, frequency of production, volume of use, etc. A sample of each described output is also included. The order in which the outputs are presented has no significance. However, the first position of the output identification code shows which subsystem the output is a part of, and the second position is always an "0," e.g., 50-1 is the first Soils output.

Section VC is a description of the inputs which are required to produce the outputs described in section VB. This section also includes Watershed inputs of lower watershed priority but which are required to produce high priority outputs for other resource programs (e.g., range). Each input is described by an input description form, similar to the output description form. It will be either an Initial Data Base Generation form (data from other systems) or a Data Base Maintenance form. As with outputs, a sample of each input form (Data Base Maintenance) is included. The order of inputs has no significance. The first position of the input identification code shows which subsystem the input is a part of and the second position is always an "1," e.g., 50-1 is the first Soils input.

PHASE I
DETAILED REQUIREMENTS DEFINITION

JUNE, 1978

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Denver, CO 80225

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OF
WATERBURY RECORD IS AVAILABLE

PHASE I
WATERBURY RECORDS DEPARTMENT

JUNE, 1964

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DENVER FEDERAL CENTER
Bldg. 50, C-251
P.O. Box 25047
DENVER, CO 80225

PREFACE

The User Requirement Specifications contain the high priority requirements of the Watershed Management Information System defined during the Detailed Requirements Definitions (DRD) Study, Phase I, of the BLM Strategic Plan as identified in the October-December 1977 field review. They represent the first increment for the design phase of the Watershed Management Information System - an initial summary of the user's requirements within the Resource Inventory - URA framework. This document is not a design document of the automated system itself.

Contents of the package include the Executive Summary (I), Problem Statement (II), Environment (III), and Watershed Information Requirements (V). Sections I, II and III are primarily narrative while Section V is devoted to an information flow chart of the system (A) and a detailed description of the outputs (B) and inputs (C).

The information flow (A) is the one part of the package listing all high priority inputs and outputs as identified in the field review of the initial package (October 1977). The chart shows generally which inputs produce which outputs.

Section VB is a detailed description of the high priority Watershed outputs which are grouped by subsystems for soils (1), vegetation/cover (2), air (3), geology (4), and water (5). Each output is described on an output description form which includes the output title, a brief description, proposed usage, frequency of production, volume of use, etc. A sample of each described output is also included. The order in which the outputs are presented has no significance. However, the first position of the output identification code shows which subsystem the output is a part of, and the second position is always an "0," e.g., S0-1 is the first Soils output.

Section VC is a description of the inputs which are required to produce the outputs described in section VB. This section also includes Watershed inputs of lower Watershed priority but which are required to produce high priority outputs for other resource programs (e.g., range). Each input is described by an input description form, similar to the output description forms. It will be either an Initial Data Base Generation form (data from other systems) or a Data Base Maintenance form. As with outputs, a sample of each input form (Data Base Maintenance) is included. The order of inputs has no significance, but the first position of the input identification code shows which subsystem the input is a part of and the second position is always an "I," e.g., SI-1 is the first Soils input.

PREFACE

The User Requirement Specification contains the high priority requirements of the Watershed Management Information System defined during the Detailed Requirements Definition (DRD) Study, Phase 1, of the BLM Strategic Plan as identified in the October-December 1977 field review. They represent the first increment for the design phase of the Watershed Management Information System - an initial summary of the user's requirements within the Resource Inventory - USA framework. This document is not a design document of the automated system itself.

Contents of the package include the Executive Summary (I), Problem Statement (II), Environment (III), and Watershed Information Requirements (V). Sections I, II and III are primarily narrative while Section V is devoted to an information flow chart of the system (A) and a detailed description of the outputs (B) and inputs (C).

The information flow (A) is the one part of the package listing all high priority inputs and outputs as identified in the field review of the initial package (October 1977). The chart shows generally which inputs produce which outputs.

Section IV is a detailed description of the high priority Watershed outputs which are grouped by subsystem for soils (I), vegetation/cover (II), air (III), energy (IV), and water (V). Each output is described on an output description form which includes the output title, a brief description, proposed usage, frequency of production, volume of use, etc. A sample of each described output is also included. The order in which the outputs are presented has no significance. However, the first position of the output identification code which subtypes the output is a part of, and the second position is always an "0", e.g., 20-1 is the first soils output.

Section VI is a description of the inputs which are required to produce the outputs described in section IV. This section also includes Watershed inputs of lower watershed priority but which are required to produce high priority outputs for other resource programs (e.g., range). Each input is described by an input description form, similar to the output description form. It will be either an initial data base generation form (data from other systems) or a data base maintenance form. As with outputs, a sample of each input form (Data Base Maintenance) is included. The order of inputs has no significance, but the first position of the input identification code which subtypes the input is a part of, and the second position is always an "1", e.g., 21-1 is the first soils input.

ACKNOWLEDGMENTS

The following individuals actively participated in development of the initial Watershed DRD, Phase I Package:

Alaska	Ken Brakken	Anchorage D0
Arizona	Cloyd Swapp	AZ Strip D0
California	Al Endo Roger Zortman	Desert Planning Staff Susanville D0
Colorado	Eric Janes Paul Summers	S0 S0
Idaho	Tom Woodward	S0
Montana	Dex Hight	Miles City D0
Nevada	Ronnie Clark	S0
New Mexico	Howard Gebel	Roswell D0
Oregon	Rick Banta Bill Power Byron Thomas	S0 Salem D0 S0
Utah	Jim Littlejohn Dick Page Bill Wagner	Richfield D0 S0 S0
Wyoming	Julian Anderson Larry Cary Dick Larsen	Rock Springs D0 Casper D0 Rawlins D0
WO	Stu Hughes Don Willen	350 350
DSC	Bob Delk Keith Eggleston Frank Giessner Jim Hagihara Sharon Heywood Dale Hoffman	307 350 350 350 200 300

ACKNOWLEDGMENTS

The following individuals actively participated in development of the initial Watershed OGD, Phase I Package:

Alaska	Ken Carlson	Alaska DOW
Arizona	Clyde Sapp	AZ Strip DOW
California	Al Kahn Roger Jordan	Desert Planning Staff Susanville DOW
Colorado	Eric Jones Paul Summers	SO SO
Idaho	Tom Woodward	SO
Montana	Max Wright	Wiles City DOW
Nevada	Ronnie Clark	SO
New Mexico	Howard Gabel	Roswell DOW
Oregon	Rick Jones Bert Jones Byron Thomas	SO Salem DOW SO
Utah	Jim Littlejohn Dick Page Bert Wagner	Richfield DOW SO SO
Wyoming	Julian Anderson Larry Cary Rick Jensen	Rock Springs DOW Casper DOW Rawlins DOW
NO	Ed Haskins Don Wilson	350 350
DC	Bob Ellis Keith Engstrom Frank Giesner Jim Haglund Sharon Heywood Dale Hoffman	307 350 350 350 350 350 350

Offices which reviewed and commented on the initial URD package included:

California SO
Nevada SO

Utah SO
W.O., Division of Watershed

All contributions to this document are very much appreciated.

Glenn H. Lipscomb
Watershed Core Team Member

A. Information Flow

WS-2

B. Outputs

1. Soils

WS-8

2. Vegetation/Cover

WS-36

3. Air

WS-42

4. Sediment

WS-51

5. Water

WS-66

C. Inputs

1. Soils

WS-98

2. Vegetation/Cover

WS-125

3. Air

WS-130

4. Sediment

WS-140

5. Water

WS-152

D. Processing Requirements

WS-174

E. Probable Impacts

WS-174

F. Data Element Dictionary

WS-175

Officers which reviewed and commented on the initial WRD package included:

Utah SO
W.O., Division of Watershed

California SO
Nevada SO

All contributions to this document are very much appreciated.

Glenn H. Lipson
Watershed Care Team Member

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WS-6	1. Soils
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WS-98	1. Soils
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WS-152	5. Water
WS-174	D. Processing Requirements
WS-174	E. Probable Impacts
WS-175	F. Data Element Dictionary

I. Executive Summary

The Watershed User Requirements Document provides the first increment (high priority outputs) for the design phase of the Watershed Management Information System. Its purpose is to define in detail the standard outputs required by field users, the required inputs, and an information flow for inputs/outputs. The document also includes data element definitions for all data elements required for defined inputs/outputs. These definitions are contained in the Watershed (Systems 141-145) Data Element Dictionary.

Contents of the document include only those outputs identified during the field review (October-December 1977) as required for immediate automation. Other outputs of lower priority (medium or low) will be considered for automation following data base design of the high priority requirements.

As noted in the Acknowledgments, a number of individuals (28) participated in development of the initial Watershed User Requirements package and four offices participated in a user review of the package. Following the package review, necessary revisions were made and a revised package prepared based on high priority needs.

II. Problem Statement

The Watershed Program consists of diverse types of inventory data including soils, vegetation/cover, air, non-mineral geology and water. To date the collection, analyses, and storage of these kinds of data have been accomplished largely through the use of manual rather than automated systems. Manually handling large quantities of these kinds of data has resulted in inefficient utilization of collected data, lost or misplaced data (e.g., with transfer of personnel), and lack of ability to make adequate analyses of the data (without computer capability). To solve these problems, data will be stored and processed through use of Bureau's comprehensive and integrated information system. Only through use of an automated system will it be possible to store, analyze and retrieve the large amounts of Watershed data required today for planning and environmental analysis purposes.

Lack of BLM Manual guidelines for resource inventories in the areas of climate, air quality, non-mineral geology, and water resources created a problem in adequately defining the requirements. For this reason, new requirements will have to be defined in the future as new inventory manuals are developed and implemented by the Bureau for these data areas.

III. Environment

At the present time most field offices are continually collecting soils, cover, air quality, and water quantity/quality data for use in planning and environmental analysis activities. Such data (maps and alphanumeric) are normally filed at the field offices (in the desks of specific technical specialists). Because handling of these data must be

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WATERSHED INFORMATION FLOW CHART

done manually, it is very time consuming and subject to human error (when analysis of the same data is repeated).

With an automated system, as soon as data are entered in the system, repeated queries can be answered immediately on a terminal with assurance that the same answer will be given repeatedly until the data file is updated. Storage of both graphic and alphanumeric data will permit interaction of the data and provide capability to retrieve data for any geographic area of interest.

Through use of computer storage, all data for a geographic area will be stored in a central location and will be accessible to any office of the Bureau with terminal facilities. This will permit data retrieval for reports, public inquiries, etc., to be accommodated without involvement of field office personnel.

IV. User-To-System Interface

For a discussion of User-to-System Interface, refer to the separate document titled "User Interface Introduction."

V. Watershed Information Requirements

A. Information Flow

This chart shows the flow of Watershed information required to generate high priority outputs (both for Watershed and other resource programs). It displays all required inputs/outputs and generally shows which inputs produce which outputs.

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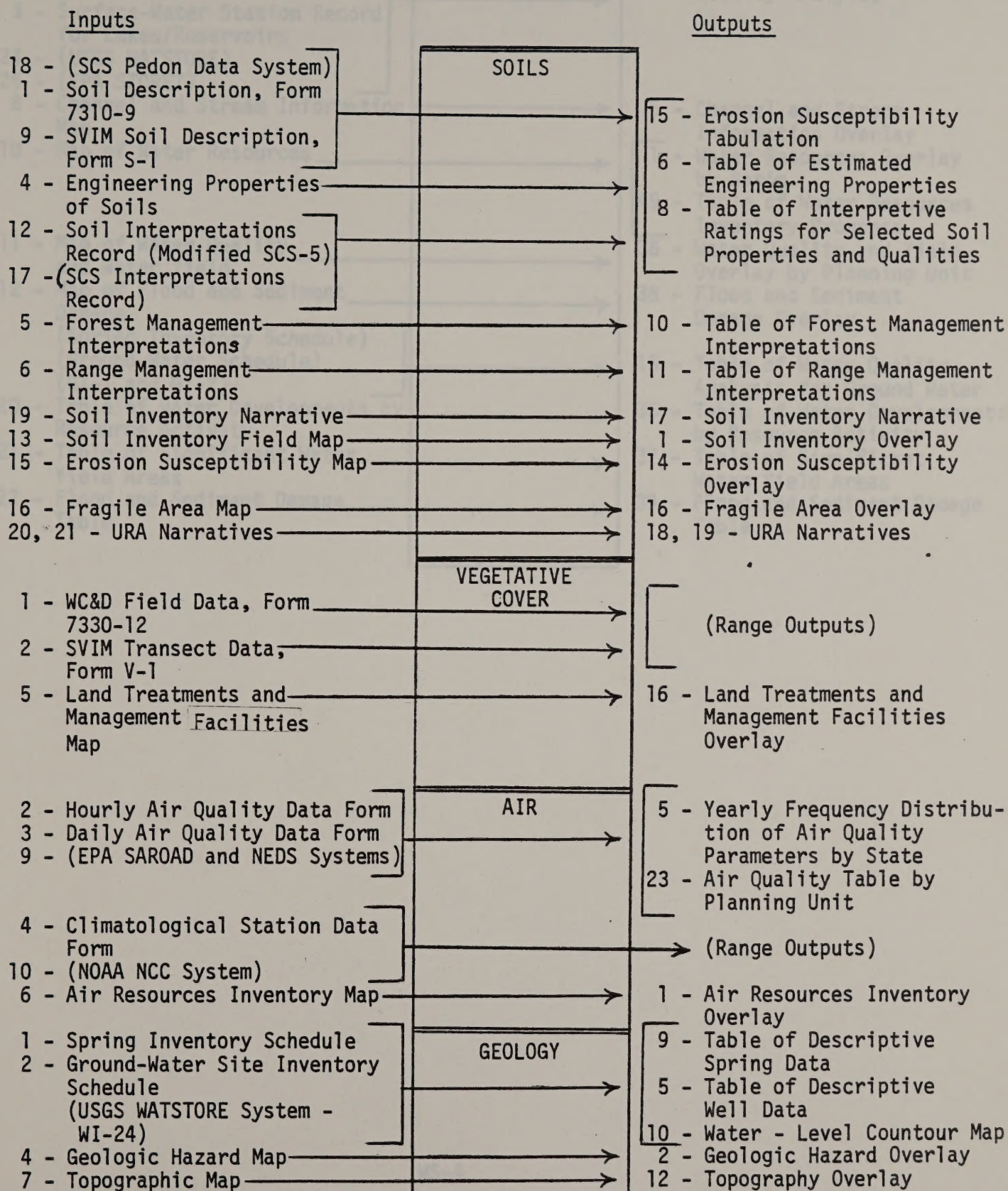
For a discussion of User-to-System Interface, refer to the separate document titled "User Interface Introduction."

V. Watershed Information Requirements

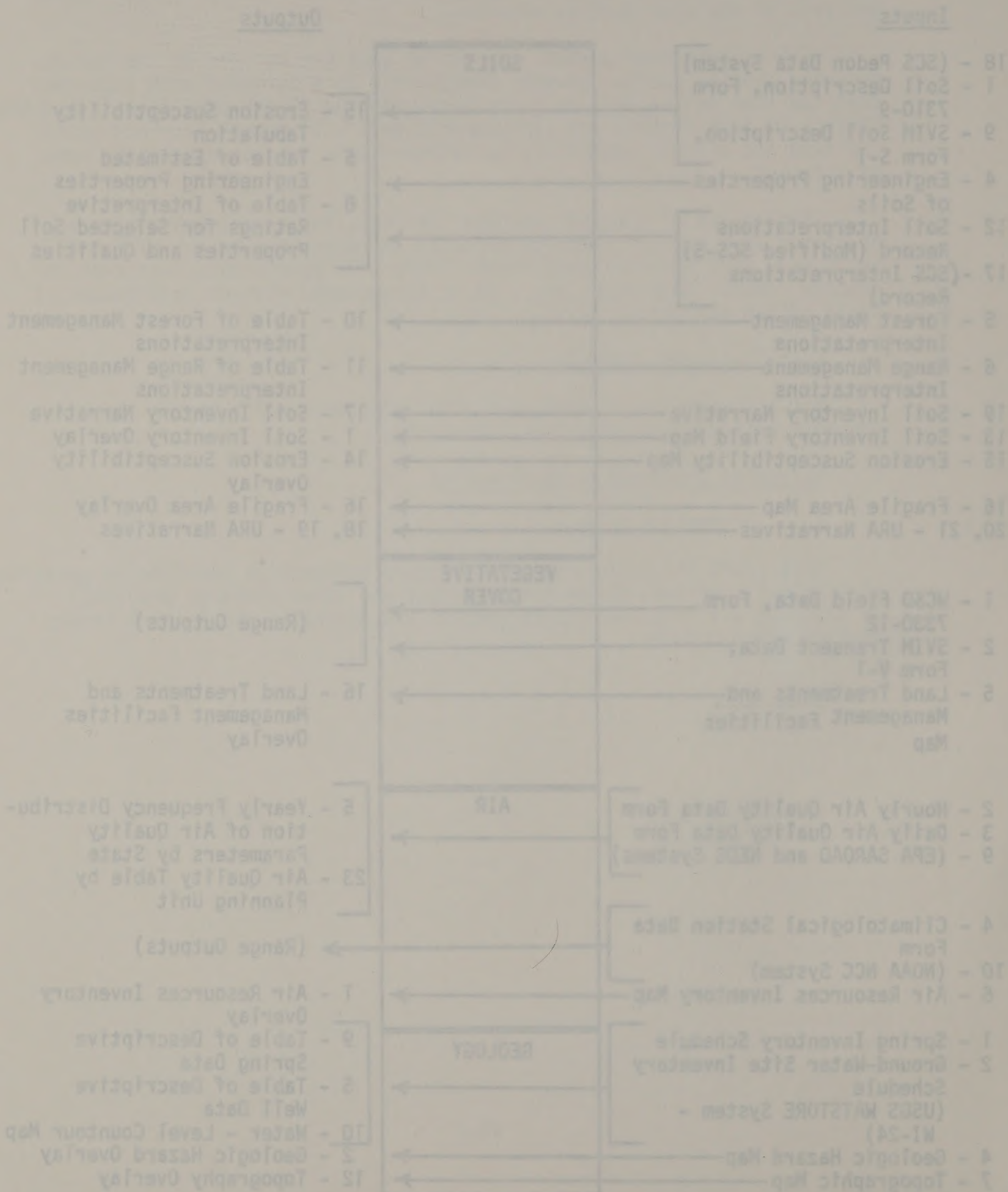
A. Information Flow

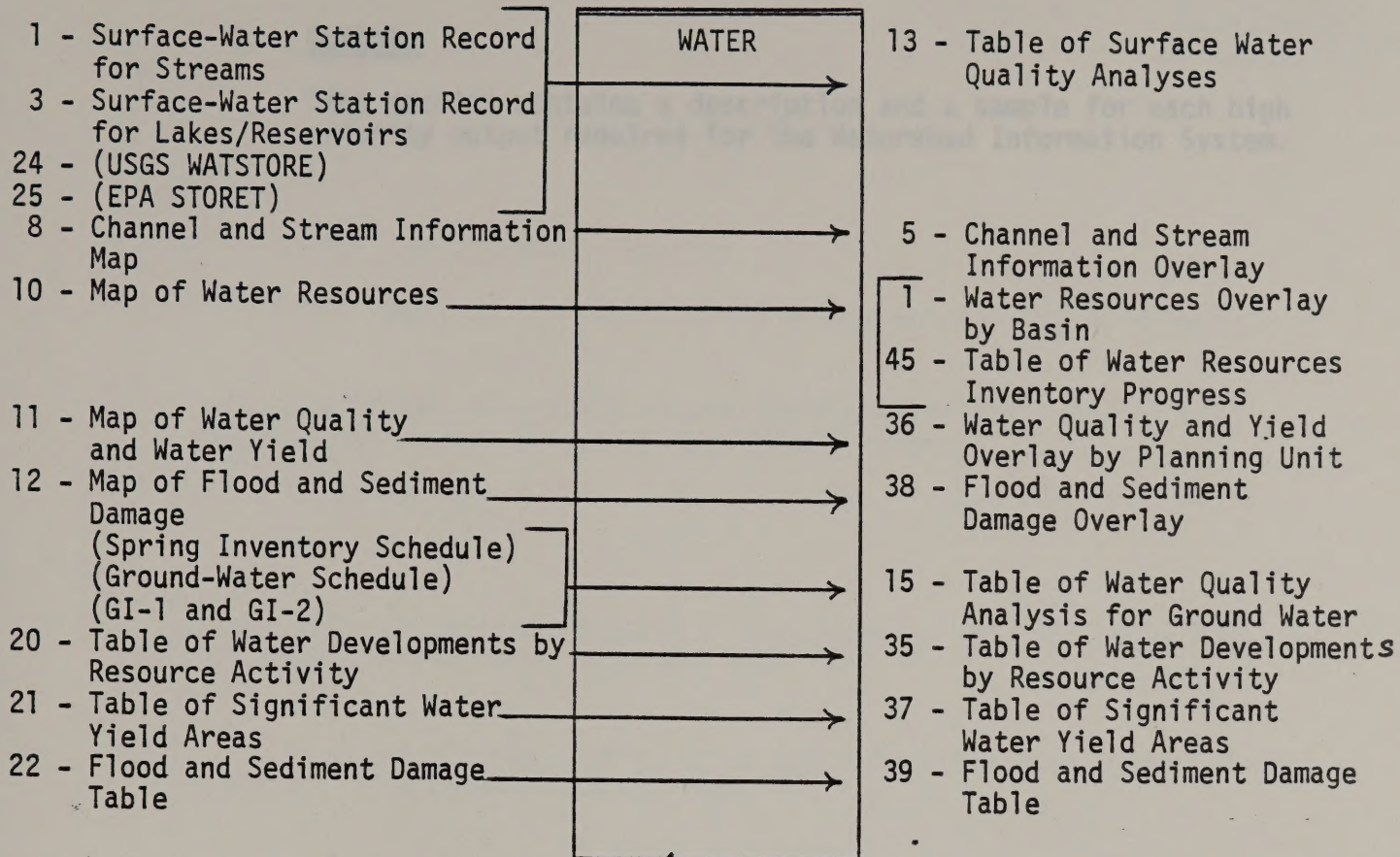
This chart shows the flow of Watershed Information required to generate high priority outputs (both for Watershed and other resource programs). It displays all required inputs/outputs and generally shows which inputs produce which outputs.

WATERSHED INFORMATION FLOW CHART



WATERSHED INFORMATION FLOW CHART





B. Outputs

This section contains a description and a sample for each high priority output required for the Watershed Information System.

OUTPUT TITLE: Soil Inventory Overlay

OUTPUT FORM: Map (on base 7-1/2 or 15 minute quad.)/graphic display

OUTPUT DESCRIPTION: A graphic display/hard copy of soil mapping unit boundaries for an inventory area (see attached)

USER(s): Soil Scientists; Natural Resource Specialists; Planners, etc. LOCATION(s): SC; SOs; DMS; RMs; etc.

USAGE: As input for URM, EAR's, ES's, activity plans, development project design, land classification, etc.

ACCESS LIMITATIONS: None

RESPONSE TIMES: DESIRED: 2 to 3 days REQUIRED: 1 week

FREQUENCY OF PRODUCTION: Weekly for Soil Scientist at SO or annually for SS at SC

DEPENDENCIES: None

REQUEST PARAMETERS: State, Geographic (100-0050)
 District, Administrative (100-0543)
 Name, Soil Inventory Areas (147-4605)
 A set of coordinates (e.g., Latitude (27-1236)
 and Longitude (27-1237); Rectangular Survey
 (127-1695, 1698, 1703, 2508, 2504)

8. Outputs

This section contains a description and a sample for each high priority output required for the Watershed Information System.

SO-1

Prog. Area: Watershed-Soils
Prep. By: G. Lipscomb
Date: 21 June 78 (Revision)

OUTPUT DESCRIPTION
Page 1 of 2

OUTPUT TITLE: Soil Inventory Overlay

OUTPUT FORM: Map (on base 7-1/2 or 15 minute quad.)/graphic display

OUTPUT DESCRIPTION: A graphic display/hard copy of soil mapping unit boundaries for an inventory area (see attached)

USER(s): Soil Scientists; Natural Resource Specialists; Planners; etc. LOCATION(s): SC; SOs; DOS; RAHs; etc.

USAGE: As input for URA, EAR's, ES's, activity plans, development project design, land classification, etc.

ACCESS LIMITATIONS: None

RESPONSE TIMES: DESIRED: 2 to 3 days REQUIRED: 1 week

FREQUENCY OF PRODUCTION: Weekly for Soil Scientist at DO to annually for SS at SC

DEPENDENCIES: None

REQUEST PARAMETERS: State, Geographic (100-0690)
District, Administrative (100-0543)
Name, Soil Inventory Areas (141-4600)
A set of coordinates (e.g., Latitude (27-1236) and Longitude (27-1237); Rectangular Survey (127-1695, 1699, 1703, 2506, 2904)

OUTPUT DESCRIPTION
Page 1 of 2

OUTPUT TITLE: Soil Inventory Overlay

OUTPUT FORM: Map (on base 1-1/2 or 1/2 minute quad.)/graphic display

OUTPUT DESCRIPTION: A graphic display/hard copy of soil mapping unit boundaries for an inventory area (see attached)

USER(s): Soil Scientists; Natural Resource Specialists; Planners; etc.
LOCATION(s): SC; SD; KS; OK; NM; etc.

USAGE: As input for URA, EIS, activity plans, development project design, land classification, etc.

ACCESS LIMITATIONS: None

RESPONSE TIMES: DESIRED: 2 to 3 days
REQUIRED: 1 week

FREQUENCY OF PRODUCTION: Weekly for Soil Scientists or 10 to annually for

DEPENDENCIES: None

REQUEST PARAMETERS: State, Geographic (100-0880)
District, Administrative (100-0843)
Name, Soil Inventory Area (141-460)
A set of coordinates (e.g., latitude (27-1236) and longitude (27-1237); Rectangular Survey (127-1655, 1699, 1703, 1806, 1804)

SO-1

OUTPUT DESCRIPTION
Page 2 of 2

OUTPUT TITLE: Soil Inventory Overlay

SORT ORDER: NA

ESTIMATED VOLUME: 20 per district

COMPUTATIONS/PROCESSES:

NA

ACCURACY: Within 5%

SCALE: Variable (usually filed at 1:24,000 or 1:62,500)

ANNOTATIONS:

See attached

LEGEND:

Standard soil map symbols keying mapping unit symbols to names of soil mapping units

REMARKS:

None

OUTPUT DESCRIPTION
Page 2 of 2

OUTPUT TITLE: Soil Inventory Overlay

SORT ORDER: NA

ESTIMATED VOLUME: 20 per district

COMPUTATIONS/PROCESS: NA

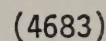
ACCURACY: Within 2%

SCALE: Variable (usually) fitted at 1:24,000 or 1:62,500

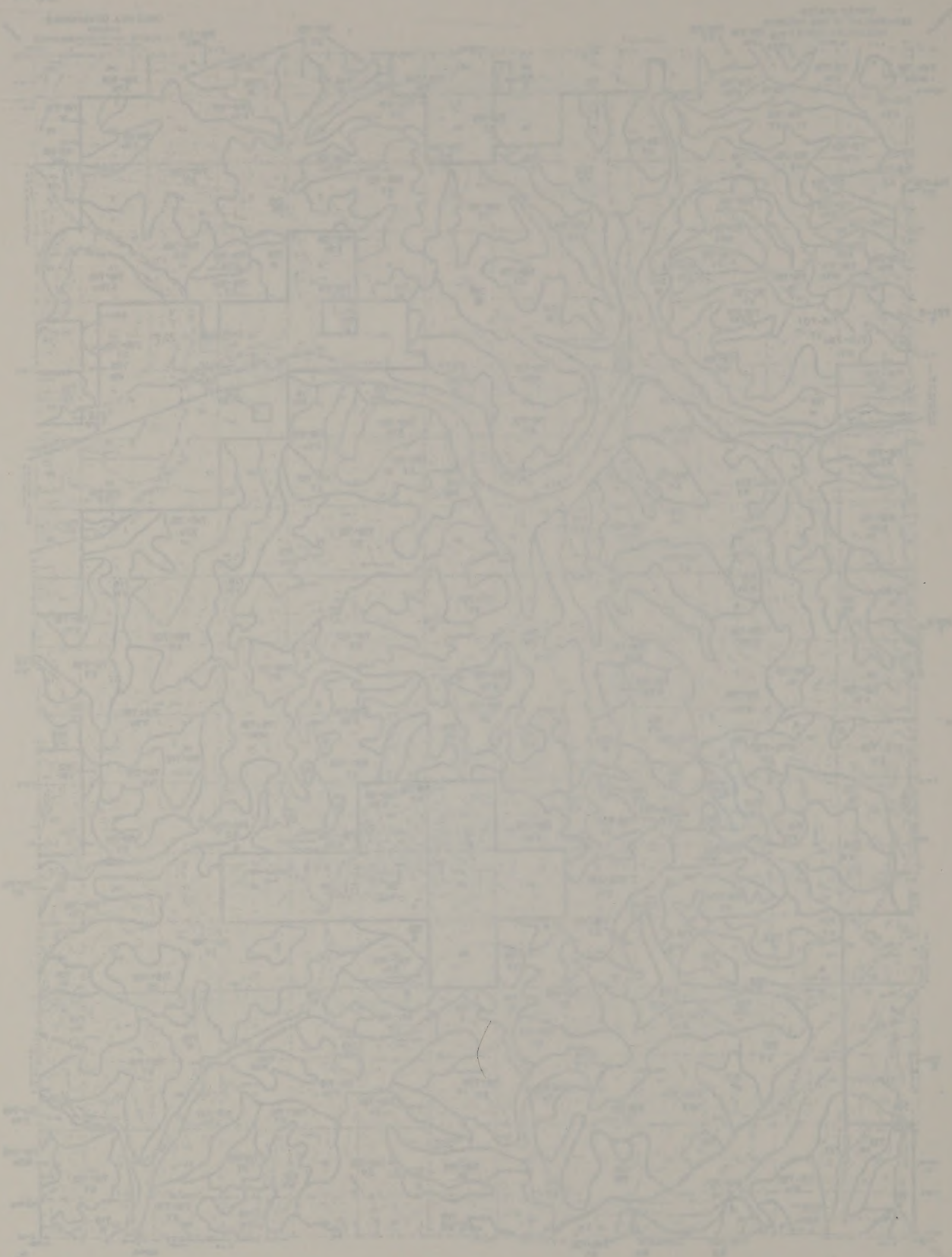
ANNOTATIONS: See attached

LEGEND: Standard soil map symbols having mapping unit symbols to names of soil mapping units

REMARKS: None



WS-8



(6648)
(6683)

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
OFFICE (0550)
DENVER (0543)

SOIL INVENTORY MAP 1973 (6630)

Name, Soil Inventory Area (6600)

SO-6

Prog. Area: Watershed-Soils
Prep. By: G. Lipscomb
Date: 21 June 78 (Revision)

OUTPUT DESCRIPTION
Page 1 of 2

OUTPUT TITLE: Table of Estimated Engineering Properties of Soils

OUTPUT FORM: Printout/Data Display

OUTPUT DESCRIPTION: A table of estimated engineering characteristics for soil taxonomic units (see attached)

USER(s): Soil Scientists; Natural Resource Specialists; Hydrologists; Engineers; etc. LOCATION(s): SC; SOs; DOs; RAHs; etc.

USAGE: As input for development/construction project design, activity plans, EARS, ESS, URA, etc.

ACCESS LIMITATIONS: None

RESPONSE TIMES: DESIRED: 2-3 days REQUIRED: 1 week

FREQUENCY OF PRODUCTION: Weekly for engineers/hydrologists/soil scientists at DO to annually for soil scientist at SC

DEPENDENCIES: None

REQUEST PARAMETERS: State, Administrative (100-0004) or State, Geographic (100-0690); District, Administrative (100-0543); County, etc. (100-0546); Planning Unit (100-1075); Name, Soil Inventory Area (141-4600); Unit, Soil Taxonomic (141-4683); Hydrologic Soil Group (141-4562)

OUTPUT DESCRIPTION
Page 1 of 2

OUTPUT TITLE: Table of Estimated Engineering Properties of Soils

OUTPUT FORM: Printout/Data Display

OUTPUT DESCRIPTION: A table of estimated engineering characteristics for soil taxonomic units (see attached)

USER(s): Soil Scientists; Natural Resource Specialists; Hydrologists; Engineers, etc.

USAGE: As input for development/construction project design, activity plans, EIS, etc.

ACCESS LIMITATIONS: None

RESPONSE TIMES: DESIGN: 2-3 days
REQUIRED: 1 week

FREQUENCY OF PRODUCTION: Weekly for engineers/hydrologists/soil scientists
as to be annually for soil scientists at SC

DEPENDENCIES: None

REQUEST PARAMETERS: State, Administrative (100-0000) or
State, Geographic (100-0000);
District, Administrative (100-0000);
County, etc. (100-0000);
Planning Unit (100-1000);
Name, Soil Inventory Area (101-4000);
Unit, Soil Taxonomic (101-4000);
Hydrologic Soil Group (101-4000)

SO-6

OUTPUT DESCRIPTION

Page 2 of 2

OUTPUT TITLE: Table of Estimated Engineering Properties of Soils

SORT ORDER: Identical to sequence of request parameters

ESTIMATED VOLUME: 4 per district

COMPUTATIONS/PROCESSES:
N/A

ACCURACY: NA

SCALE: NA

ANNOTATIONS: NA

LEGEND: NA

REMARKS:
None

NAME

REMARKS:

NO

STATUS:

NO

REMARKS:

NO

STATUS:

NO

REMARKS:

NO

REMARKS:

REMARKS:

REMARKS:

REMARKS:

REMARKS:

REMARKS:

REMARKS:

10-12

10-12

10-12

TABLE OF ESTIMATED ENGINEERING PROPERTIES OF SOILS

State (0690)(0004); District (0543);
Soil Inv. Area (4600); County (0546).

Soil Series	Soil Name	Depth From Surface (inches)	Depth to Bedrock (inches)	Hydro-logic Group	Shrink/Swell Potential	---CORROSIVITY---		CLASSIFICATION			Coarse Fragments >3" (percent)	Liquid Limit (percent)	Plasticity Index
(4683)	(4648)	(4547)	(4546)	(4562)	(4635)	Uncoated Steel (4540)	Concrete (4539)	USDA Texture (4526)	Unified (4523)	AASHTO (4522)	(4605) (4606)	(4571)	(4564)
36	Witzel	0-19	12-20	D	Low	Moderate	Moderate	Very cobbly silty clay loam	GC or CL	A-6	30-60	35-40	15-20
(5311)													
370	Unnamed	0-60	40+	B	Moderate	Moderate	Moderate	Gravelly clay loam	CL	A-6	0-40	25-35	15-20
371	Unnamed	0-9	20-40	B	Low	Moderate	Moderate	Loam	ML or CL-ML	A-4 or A-6	0	25-35	5-10
		9-34			Low	High	Moderate	Very gravelly loam	GM	A-2	0-20	25-35	5-10
372	Unnamed	0-18	12-20	D	Low	Moderate	Moderate	Very gravelly loam	GM	A-4 or A-2	0-20	20-30	5-10
380	Pollard	0-9	40+	C	Low	Moderate	Low	Loam or clay loam	ML or CL	A-6	0-15	35-40	10-15
		9-50			Moderate	High	Moderate	Clay	ML or MH	A-7-5	0	45-55	15-20
381	Unnamed	0-14	20-40	C	Low	Moderate	Low	Gravelly loam or gravelly clay loam	ML or GM	A-4 or A-6	0	25-40	5-15
		14-34			Moderate	High	Moderate	Gravelly clay or gravelly clay loam	CL or ML	A-6, A-7-5	0-20	35-50	15-25
382	Unnamed	0-11	40+	C	Low	Moderate	Low	Gravelly clay loam	GM	A-4 or A-6	0-10	25-40	5-15
		11-74			Moderate	High	Moderate	Very gravelly clay or very gravelly silty clay	GC or CL	A-7-5	0-20	45-55	15-20
701	Unnamed	0-8	12-20	D	Low	Low	Low	Gravelly loam	SM	A-4, A-2	0-20	20-30	NP-5
		8-13			Low	Low	Low	Very gravelly loam	GM or CL	A-4 or A-6	0-20	20-30	5-10
704	Carney	0-30	20-40	D	High	High	Low	Clay	CH	A-7-6	0-30	60-75	35-45
705	Unnamed	0-7	20-40	C	Low	Low	Low	Cobbly clay loam	ML or CL	A-4	0-35	30-35	5-10
		7-31			Moderate	Moderate	Low	Very cobbly clay	CG	A-6, A-7-5	30-60	35-50	15-25
706	Medco	0-13	20-40	D	Moderate	Moderate	Low	Loam or clay loam	ML, SM or GM	A-6 or A-4	0-40	30-40	5-15
		13-27			High	High	Low	Clay	CH	A-7	0-20	60-80	35-50
710	Coker	0-70	40+	D	High	High	Low	Clay	CH	A-7	0-5	60-75	35-45
712	Jumpoff	0-5	40+	C	Moderate	Low	Low	Gravelly clay loam	CL-ML, ML	A-4	0	25-35	5-10
		5-52			High	Low	Moderate	Clay	CL or CH	A-7-6	0	45-60	30-40

Prog. Area: Watershed-Soils
Prep. By: G. Lipscomb
Date: 21 June 78
(Revision)

SO-8

OUTPUT DESCRIPTION
Page 1 of 2

OUTPUT TITLE: Table of Interpretive Ratings for Selected Soil Properties
and Qualities

OUTPUT FORM: Printout/Data Display

OUTPUT DESCRIPTION: A table of information about soil taxonomic units
that is significant for management interpretations (see attached)

USER(s): Soil Scientists; Natural Resource Specialists; Planners;
Watershed Specialists; etc. LOCATION(s): SC; SOs; DOs; RAHs; etc.

USAGE: As input to URAs, EARs, ESS, activity plans, land use authoriza-
tions, land classifications, etc.

ACCESS LIMITATIONS: None

RESPONSE TIMES: DESIRED: 1 day

REQUIRED: 2 to 3 days

FREQUENCY OF PRODUCTION: Weekly for soil scientists at DO to monthly
for others

DEPENDENCIES: None

REQUEST PARAMETERS: State, Administrative (100-0004) or
State, Geographic (100-0690);
District, Administrative (100-0543);
County, etc. (100-0546);
Planning Unit (100-1075);
Name, Soil Inventory Area (141-4600);
Unit, Soil Taxonomic (141-4683)

Prepared-2012
 By: G. J. J. J.
 Date: 27 June 78
 (revision)

80-8

OUTPUT DESCRIPTION
 Page 1 of 2

OUTPUT TITLE: Table of Interpretive Ratings for Selected Soil Properties
 and Qualities
 OUTPUT FORM: Printout/Query Display

OUTPUT DESCRIPTION: A table of information about soil taxonomic units
 that is significant for management interpretations (see attached)

USER(s): Soil Scientists; Natural
 Resource Specialists; Planners;
 Watershed Specialists; etc.
 USAGE: As input to NARS, ERS, activity plans, land use authoriza-
 tions, land classifications, etc.

ACCESS LIMITATIONS: None

RESPONSE TIMES: DESIRED: 1 day
 REQUIRED: 2 to 3 days

FREQUENCY OF PRODUCTION: Weekly for soil scientists at DO to monthly
 for others

DEPENDENCIES: None

REQUEST PARAMETERS: State, Administrative (100-0004) or
 State, Geographic (100-0590);
 District, Administrative (100-0543);
 County, etc. (100-0516);
 Planning Unit (100-1075);
 Name, Soil Inventory Area (147-4800);
 Unit, Soil Taxonomic (147-4883)

SO-8

OUTPUT DESCRIPTION
Page 2 of 2

OUTPUT TITLE: Table of Interpretive Ratings for Selected Soil Properties
and Qualities

SORT ORDER: Identical to sequence of request parameters

ESTIMATED VOLUME: 8 per district

COMPUTATIONS/PROCESSES: NA

ACCURACY: NA

SCALE: NA

ANNOTATIONS: NA

LEGEND: NA

REMARKS: None

TABLE OF INTERPRETIVE RATINGS FOR SELECTED SOIL PROPERTIES AND QUALITIES

County (0546); State (0690)(0004);
P.U. (1075); District (0543);
Soil Inv. Area (4600)

(4683) Soil Series Symbol	(4648) Soil Name	(4547) Depth (Inches)	(4517) Permeability	(4520) Runoff	(4514) Drainage	(4546) (4569) Limiting Layer	(4533) Available Water Capacity (Inches)	(0755) ERD	(0694) Annual Precipitation (Inches)	(4638) Effective Precipitation (in)	(4556) Compaction Hazard	(4518) (4515) Erosion Condition / Sus.	(4641) Reaction Range	(4557) Flood Hazard	(4661) Frost Susceptibility
36	Witzel	12-20	Moderately Slow	Runoff	Well Drained	Limiting Layer	<3		20-35		Slight	Erosion Condition / Sus.	5.6-6.0	Flood Hazard	Moderate
370	Unnamed	40+	Moderate		Well Drained		3-6		35-70+		Moderate		5.8-6.3		Severe
371	Unnamed	20-40	Moderate		Well Drained		3-6		35-70+		Slight		5.6-5.7		Moderate
372	Unnamed	12-20	Moderate		Well Drained		<3		35-70+		Slight		5.8-6.0		Moderate
380	Pollard	40+	Moderately Slow		Well Drained		6-9		35-70+		Severe		5.4-5.5		Severe
381	Unnamed	20-40	Moderately Slow		Well Drained		3-6		35-70+		Moderate- Severe		5.8-6.4		Moderate
382	Unnamed	40+	Moderately Slow		Well Drained		3-6		35-70+		Moderate- Severe		5.8-6.5		Moderate
701	Unnamed	12-20	Moderate- Moderately Rapid		Well Drained- Somewhat Excessively Drained		<3		20-35		Slight		5.6-6.5		Moderate
704	Carney	20-40	Very Slow		Well Drained		<3		18-30		Severe		6.1-7.3		Severe
705	Unnamed	20-40	Moderately Slow		Well Drained		3-6		20-35		Moderate		6.1-7.3		Moderate
706	Medco	20-40	Very Slow		Moderately Well Drained		3-6		20-35		Severe		6.1-6.0		Severe
710	Coker	40+	Very Slow		Somewhat Poorly Drained		6-9		18-25		Severe		6.6-8.4		Severe
712	Jumpoff	40+	Slow-Very Slow		Moderately Well Drained		3-6		30-50		Severe		6.2-6.4		Severe
715	Brader	12-20	Moderate		Well Drained		<3		18-30		Slight		6.0-6.5		Severe
716	Debenger	20-40	Moderate		Well Drained		3-6		18-30		Slight		6.0-6.5		Severe
718	Beekman	20-40	Moderate		Well Drained		3-6		20-35		Slight		6.1-6.6		Moderate
719	Manzanita	40+	Moderately Slow		Well Drained		6-9		20-35		Severe		5.6-6.5		Severe
721	Siskiyou	20-40	Moderately Rapid		Somewhat Excessively Drained		<3		30-50		Slight		5.1-6.0		Severe

Source: (1960) 1960-1961 Seasonal Report
 (1960) 1960-1961 Seasonal Report
 (1960) 1960-1961 Seasonal Report

Station	Date	Time	Location	Depth (m)	Temperature (°C)	Salinity (‰)	Density (σ _t)	Wind Speed (m/s)	Wave Height (m)	Cloud Cover (%)	Visibility (km)	Remarks
101	1960-10-10	08:00	Station 101	10	18.5	35.2	1.024	10	1.5	100	10	Clear
102	1960-10-10	09:00	Station 102	15	18.0	35.1	1.024	12	1.8	100	10	Clear
103	1960-10-10	10:00	Station 103	20	17.5	35.0	1.024	15	2.0	100	10	Clear
104	1960-10-10	11:00	Station 104	25	17.0	34.9	1.024	18	2.2	100	10	Clear
105	1960-10-10	12:00	Station 105	30	16.5	34.8	1.024	20	2.5	100	10	Clear
106	1960-10-10	13:00	Station 106	35	16.0	34.7	1.024	22	2.8	100	10	Clear
107	1960-10-10	14:00	Station 107	40	15.5	34.6	1.024	25	3.0	100	10	Clear
108	1960-10-10	15:00	Station 108	45	15.0	34.5	1.024	28	3.2	100	10	Clear
109	1960-10-10	16:00	Station 109	50	14.5	34.4	1.024	30	3.5	100	10	Clear
110	1960-10-10	17:00	Station 110	55	14.0	34.3	1.024	32	3.8	100	10	Clear
111	1960-10-10	18:00	Station 111	60	13.5	34.2	1.024	35	4.0	100	10	Clear
112	1960-10-10	19:00	Station 112	65	13.0	34.1	1.024	38	4.2	100	10	Clear
113	1960-10-10	20:00	Station 113	70	12.5	34.0	1.024	40	4.5	100	10	Clear
114	1960-10-10	21:00	Station 114	75	12.0	33.9	1.024	42	4.8	100	10	Clear
115	1960-10-10	22:00	Station 115	80	11.5	33.8	1.024	45	5.0	100	10	Clear
116	1960-10-10	23:00	Station 116	85	11.0	33.7	1.024	48	5.2	100	10	Clear
117	1960-10-11	00:00	Station 117	90	10.5	33.6	1.024	50	5.5	100	10	Clear
118	1960-10-11	01:00	Station 118	95	10.0	33.5	1.024	52	5.8	100	10	Clear
119	1960-10-11	02:00	Station 119	100	9.5	33.4	1.024	55	6.0	100	10	Clear
120	1960-10-11	03:00	Station 120	105	9.0	33.3	1.024	58	6.2	100	10	Clear
121	1960-10-11	04:00	Station 121	110	8.5	33.2	1.024	60	6.5	100	10	Clear
122	1960-10-11	05:00	Station 122	115	8.0	33.1	1.024	62	6.8	100	10	Clear
123	1960-10-11	06:00	Station 123	120	7.5	33.0	1.024	65	7.0	100	10	Clear
124	1960-10-11	07:00	Station 124	125	7.0	32.9	1.024	68	7.2	100	10	Clear
125	1960-10-11	08:00	Station 125	130	6.5	32.8	1.024	70	7.5	100	10	Clear
126	1960-10-11	09:00	Station 126	135	6.0	32.7	1.024	72	7.8	100	10	Clear
127	1960-10-11	10:00	Station 127	140	5.5	32.6	1.024	75	8.0	100	10	Clear
128	1960-10-11	11:00	Station 128	145	5.0	32.5	1.024	78	8.2	100	10	Clear
129	1960-10-11	12:00	Station 129	150	4.5	32.4	1.024	80	8.5	100	10	Clear
130	1960-10-11	13:00	Station 130	155	4.0	32.3	1.024	82	8.8	100	10	Clear
131	1960-10-11	14:00	Station 131	160	3.5	32.2	1.024	85	9.0	100	10	Clear
132	1960-10-11	15:00	Station 132	165	3.0	32.1	1.024	88	9.2	100	10	Clear
133	1960-10-11	16:00	Station 133	170	2.5	32.0	1.024	90	9.5	100	10	Clear
134	1960-10-11	17:00	Station 134	175	2.0	31.9	1.024	92	9.8	100	10	Clear
135	1960-10-11	18:00	Station 135	180	1.5	31.8	1.024	95	10.0	100	10	Clear
136	1960-10-11	19:00	Station 136	185	1.0	31.7	1.024	98	10.2	100	10	Clear
137	1960-10-11	20:00	Station 137	190	0.5	31.6	1.024	100	10.5	100	10	Clear
138	1960-10-11	21:00	Station 138	195	0.0	31.5	1.024	102	10.8	100	10	Clear
139	1960-10-11	22:00	Station 139	200	-0.5	31.4	1.024	105	11.0	100	10	Clear
140	1960-10-11	23:00	Station 140	205	-1.0	31.3	1.024	108	11.2	100	10	Clear
141	1960-10-12	00:00	Station 141	210	-1.5	31.2	1.024	110	11.5	100	10	Clear
142	1960-10-12	01:00	Station 142	215	-2.0	31.1	1.024	112	11.8	100	10	Clear
143	1960-10-12	02:00	Station 143	220	-2.5	31.0	1.024	115	12.0	100	10	Clear
144	1960-10-12	03:00	Station 144	225	-3.0	30.9	1.024	118	12.2	100	10	Clear
145	1960-10-12	04:00	Station 145	230	-3.5	30.8	1.024	120	12.5	100	10	Clear
146	1960-10-12	05:00	Station 146	235	-4.0	30.7	1.024	122	12.8	100	10	Clear
147	1960-10-12	06:00	Station 147	240	-4.5	30.6	1.024	125	13.0	100	10	Clear
148	1960-10-12	07:00	Station 148	245	-5.0	30.5	1.024	128	13.2	100	10	Clear
149	1960-10-12	08:00	Station 149	250	-5.5	30.4	1.024	130	13.5	100	10	Clear
150	1960-10-12	09:00	Station 150	255	-6.0	30.3	1.024	132	13.8	100	10	Clear

OUTPUT DESCRIPTION
Page 1 of 2

OUTPUT TITLE: Table of Forest Management Interpretations

OUTPUT FORM: Printout/Data Display

OUTPUT DESCRIPTION: A table of forest management interpretations for soil taxonomic units (see attached)

USER(s): Foresters; Soil Scientists; Planners; etc.

LOCATION(s): SOs; DOs; RAHs; etc.

USAGE: As input to forest management activity plans, reforestation plans, URAs, etc.

ACCESS LIMITATIONS: None

RESPONSE TIMES: DESIRED: 2 to 3 days REQUIRED: 1 week

FREQUENCY OF PRODUCTION: Monthly for DO foresters/soil scientists to annually for SO forester

DEPENDENCIES: None

REQUEST PARAMETERS: State, Administrative (100-0004) or State, Geographic (100-0690); District, Administrative (100-0543); County, etc. (100-0546); Planning Unit (100-1075); Name, Soil Inventory Area (141-4600); Unit, Soil Taxonomic (141-4683)

Watershed-Soils
 Prod. Area: 6.1 percent
 Prep. By: 21 June 78
 Date: (revision)

20-10

OUTPUT DESCRIPTION Page 1 of 2

OUTPUT TITLE: Table of Forest Management Interpretations

OUTPUT FROM: Printed/Data Display

OUTPUT DESCRIPTION: A table of forest management interpretations for soil taxonomic units (see attached)

USERS: Foresters; Soil Scientists; Planners; etc.
 LOCATION(s): 20; D0; RAH; etc.

USAGE: As input to forest management activity plans, reforestation plans, etc.

ACCESS LIMITATIONS: None

RESPONSE TIME: 5 to 3 days
 REQUIRED: 1 week

FREQUENCY OF PRODUCTION: Monthly for 20 foresters/soil scientists to annually for 20 foresters

DEPENDENCIES: None

REQUEST PARAMETERS: State, Administrative (100-0004) or State, Geographic (100-0000); District, Administrative (100-0043); County, etc. (100-0046); Planning Unit (100-1075); State, Soil Inventory Area (1A1-4000); Unit, Soil Taxonomic (1A1-4003)

80-10

OUTPUT DESCRIPTION
Page 2 of 2

S0-10

OUTPUT TITLE: Table of Forest Management Interpretations

SORT ORDER: Identical to sequence of request parameters

ESTIMATED VOLUME: 30 per district

COMPUTATIONS/PROCESSES:

NA

ACCURACY: NA

SCALE: NA

ANNOTATIONS: NA

LEGEND: NA

REMARKS: None

12-12

12-12

12-12

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12-12

State(0690)(0004);P.U.(1075);
County(0546);District(0543);
Soil Inv. Area(4600).

TABLE OF FOREST MANAGEMENT INTERPRETATIONS

Soil Series Symbol (4683) 36	Soil Name (4648) Witzel	Forest Type Managed (5767)	Site Class Type (5926)	Productivity Site Index and Class2/ (5750) (5751)	Regeneration, Hazard (Bare Root) (4559) (4558)	Remarks (6954)
						Nonforest soils.
1/ 370/n	Unnamed, northerly aspect	Douglas-fir	A	150-III (4)	Slight (4560)	Soils with higher site index receive seepage water. Windthrow is a hazard in the Low Divide area.
1/ 370	Unnamed, southerly aspect	Douglas-fir	A	130-III (1)	Moderate	Soils with higher site index receive seepage water. Windthrow is a hazard in the Low Divide area.
1/ 371/n	Unnamed, northerly aspect	Douglas-fir	A	115-IV (3)	Moderate	
1/ 371	Unnamed, southerly aspect	Douglas-fir	A	115-IV (3)	Severe	
1/ 372/n	Unnamed, northerly aspect	Douglas-fir	A	100-V (3)	Severe	
1/ 372	Unnamed, southerly aspect	Douglas-fir	A	80-V (1)	Severe	
1/ 380/n	Pollard, northerly aspect	Douglas-fir	A	III	Slight	
1/ 380	Pollard, southerly aspect	Douglas-fir	A	145-III (3)	Moderate	Site class is lower near zones of low precipitation.
1/ 381/n	Unnamed, northerly aspect	Douglas-fir	A	130-III (1)	Moderate	
1/ 381	Unnamed, southerly aspect	Douglas-fir	A	125-IV (2)	Severe	
1/ 382/n	Unnamed, northerly aspect	Douglas-fir	A	120-IV	Moderate	Site class data are from forest inventory records.
1/ 382	Unnamed, southerly aspect	Douglas-fir	A	115-IV (5)	Moderate	
701/n	Unnamed, northerly aspect	Douglas-fir	B	80-V	Severe	Site class data are from SCS records.
701	Unnamed, southerly aspect	Ponderosa pine	C	80-V	Severe	Site class data are from SCS records.
		--		--	--	Nonforest soils.
704	Carney	--		--	--	Nonforest soils.
705/n	Unnamed, northerly aspect	Douglas-fir	B	85-V	Severe	Site class data are from SCS records.
705	Unnamed, southerly aspect	--		--	--	Nonforest soils.
706/n	Medco, northerly aspect	Douglas-fir	A	90-V (1)	--	Site class data are from SCS records.
706	Medco, southerly aspect	--		--	--	Nonforest soils.
710	Coker	--		--	--	Nonforest soils.
712/n	Jumpoff, northerly aspect	Douglas-fir	A	105-IV	Severe	Site class data are from forest inventory records.
712	Jumpoff, southerly aspect	Douglas-fir	A	90-V	Severe	Site class data are from forest inventory records.
715	Brader	--		--	--	Nonforest soils.
716	Debenger	--		--	--	Nonforest soils.
718/n	Beekman, northerly aspect	Douglas-fir	A	110 to 90-IV to V	Severe	Site class data are from SCS records. Productivity is higher at elevations above 3000 feet.
718	Beekman, southerly aspect	Douglas-fir	A	95-V	Severe	Site class data are from forest inventory records.

1/ Soils with measured data.

2/ From tables in Field Instructions for Integrated Forest Survey and Timber Management Inventories in Western Oregon, 1968. BLM, Portland, Oregon.
The number in parentheses show number of plots examined with 3 to 5 trees per plot.

SO-11

Prog. Area: Watershed-Soils
Prep. By: G. Lipscomb
Date: 21 June 78
(Revision)

OUTPUT DESCRIPTION
Page 1 of 2

OUTPUT TITLE: Table of Range Management Interpretations

OUTPUT FORM: Printout/Data Display

OUTPUT DESCRIPTION: A table of range management interpretations for soil taxonomic units (see attached)

USER(s): Range Specialists;
Soil Scientists; Planners, etc.

LOCATION(s): SOs; DOs; RAHs; etc.

USAGE: As input to range management AMPs, range improvement plans, URAs, etc.

ACCESS LIMITATIONS: None

RESPONSE TIMES: DESIRED: 2 to 3 days REQUIRED: 1 week

FREQUENCY OF PRODUCTION: Monthly for DO range specialist/soil scientist to annually for others

DEPENDENCIES: None

REQUEST PARAMETERS: State, Administrative (100-0004) or
State, Geographic (100-0690);
District, Administrative (100-0543);
County, etc. (100-0546);
Planning Unit (100-1075);
Name, Soil Inventory Area (141-4600);
Unit, Soil Taxonomic (141-4683)

WS-18

OUTPUT DESCRIPTION
Page 1 of 2

OUTPUT TITLE: Table of Range Management Interpretations

OUTPUT FORM: Printout/Date Display

OUTPUT DESCRIPTION: A table of range management interpretations for
soil taxonomic units (see attached)

USER(s): Range Specialist;
Soil Scientist; Planner, etc.
LOCATION(s): SOA; DMS; RANS; etc.

USAGE: As input to range management plans, range improvement plans, URAs,
etc.

ACCESS LIMITATIONS: None

RESPONSE TIME: DESIRED: 1 to 2 days
REQUIRED: 1 week

FREQUENCY OF PRODUCTION: Monthly for SO range specialist/soil scientist;
as annually for others

DEPENDENCIES: None

REQUEST PARAMETERS: State, Administrative (100-0004) or
State Geographic (100-0280);
District, Administrative (100-0243);
County, etc. (100-0244);
Planning Unit (100-1075);
Name, Soil Inventory Area (141-4800);
Unit, Soil Taxonomic (141-4883)

S0-11

OUTPUT DESCRIPTION
Page 2 of 2

OUTPUT TITLE: Table of Range Management Interpretations

SORT ORDER: Identical to sequence of request parameters

ESTIMATED VOLUME: 4 per district

COMPUTATIONS/PROCESSES: NA

ACCURACY: NA

SCALE: NA

ANNOTATIONS: NA

LEGEND: NA

REMARKS: None

1000

259400

1000

1000

259400

1000

1000

1000

1000

1000

1000

11-02

1000

1000

State(0690)(0004); PU(1075);
County(0546);District(0543);
Soil Inv. Area(4600).

TABLE OF RANGE MANAGEMENT INTERPRETATIONS

Soil Symbol (4683)	Soil Name (4648)	Vegetation Sub-Type (2706)	Key Species and Percent Cover (2631)	(3824)	Productive Capacity Potential (4534)	Normal Growing Season (0997) (0998)	Normal Grazing Season (3845)
* 36/n	Witzel, northerly aspect	--	--	--	--	--	--
* 36	Witzel, southerly aspect	--	--	--	--	--	--
*370	Unnamed	--	--	--	--	--	--
*371	Unnamed	--	--	--	--	--	--
*372	Unnamed	--	--	--	--	--	--
*380	Pollard	--	--	--	--	--	--
*381	Unnamed	--	--	--	--	--	--
*382	Unnamed	--	--	--	--	--	--
*701/n	Unnamed, northerly aspect	--	--	--	--	--	--
*701	Unnamed, southerly aspect	--	--	--	--	--	--
704	Carney, southerly aspect	Oak - Pine - Oatgrass	White oak Ponderosa pine California oatgrass Idaho fescue	35-50 5-15 50-65 1- 5	2-3	2/15- 7/1	--
705	Unnamed, southerly aspect	Douglas-fir - Mixed Pine Forest	Douglas-fir Ponderosa pine Sugar pine Western fescue Mountain brome	40-60 5-10 5-10 5-10 Trace- 2	--	2/15- 7/15	--
706/n	Medco, northerly aspect	Douglas-fir Forest	Douglas-fir Madrone Black oak Western fescue Mountain brome	65-80 1- 5 1- 5 2- 3 2- 3	--	3/15- 8/ 1	--
706	Medco, southerly aspect	Oak - Pine - Fescue	White oak Ponderosa pine Idaho fescue	50-70 Trace- 3 35-45	2-5	2/15- 6/15	--
710	Coker, southerly aspect	Oak - Pine - Oatgrass	White oak Black oak Pacific serviceberry Poison oak California oatgrass Idaho fescue	35-50 1-10 1- 3 1- 3 50-65 1- 5	2-3	3/ 1- 7/15	5/ 1-11/ 1
*712	Jumpoff	--	--	--	--	--	--

*These soils are not now used for grazing, or information is not available.

SO-14

Prog. Area: Watershed-Soils
Prep. By: G. Lipscomb
Date: 21 June 78 (Revision)

OUTPUT DESCRIPTION
Page 1 of 2

OUTPUT TITLE: Erosion Susceptibility Overlay

OUTPUT FORM: Map/graphic display

OUTPUT DESCRIPTION: A graphic display/hard copy of boundaries of erosion susceptibility classes for a planning area (See Attached)

USER(s): Soil Scientists; Planners; LOCATION(s): SC; SOs; DOs; RAHs; etc.
Natural Resource Specialists; etc

USAGE: As input to URAs, EARs; ESs, activity plans, development/construction project design, land classification, etc.

ACCESS LIMITATIONS: None

RESPONSE TIMES: DESIRED: 2 to 3 days REQUIRED: 1 week

FREQUENCY OF PRODUCTION: Monthly for soil scientist/planner at DO to annually for others

DEPENDENCIES: None

REQUEST PARAMETERS: State, Geographic (100-0690);
District, Administrative (100-0543);
Name, Soil Inventory Areas (141-4600);
Planning Unit (100-1075);
a set of coordinates (e.g., Latitude (27-1236)
and Longitude (27-1237); Rectangular Survey
(127-1695, 1699, 1703, 2506, 2904)

Project Area: Watershed-2012
 Prep. By: J. L. Brown
 Date: 21 June 78 (Revision)

20-14

OUTPUT DESCRIPTION Page 1 of 5

OUTPUT TITLE: Erosion Susceptibility Overlay
 OUTPUT FORM: Map/graphic display

OUTPUT DESCRIPTION: A graphic display/hard copy of boundaries of erosion susceptibility classes for a planning area (See Attached)

USER(s): Soil Scientists; Planners; LOCATION(s): SC; SD; DS; RAHS; etc.
 Natural Resource Specialists; etc

USAGE: As input to URA; EIS; activity plans, development, construction project design, land classification, etc.

ACCESS LIMITATIONS: None

RESPONSE TIMES: DESIRED: 5 to 7 days
 REQUIRED: 1 week

FREQUENCY OF PRODUCTION: Monthly for soil scientist/planner at SD to annually for others

DEPENDENCIES: None

REQUEST PARAMETERS: State, Geographic (700-0630);
 District, Administrative (100-0543);
 Name, Soil Inventory Area (147-4600);
 Planning Unit (700-1072);
 A set of coordinates (e.g., Latitude (37-1238)
 and Longitude (87-1237); Rectangular Survey
 (123-1232, 123, 1203, 2505, 2904)

OUTPUT DESCRIPTION
Page 2 of 2

OUTPUT TITLE: Erosion Susceptibility Overlay

SORT ORDER: NA

ESTIMATED VOLUME: 2 per district

COMPUTATIONS/PROCESSES: NA

ACCURACY: Within 5%

SCALE: Variable (filed at 1:24,000 or 1:62,500)

ANNOTATIONS: See attached

LEGEND: Standard map symbols for depicting three erosion susceptibility classes plus areas with permafrost and/or mantle stability problems (see legend on attachment)

REMARKS: None

OUTPUT DESCRIPTION
Page 2 of 2

OUTPUT TITLE: Erosion Susceptibility Overlay

Sort Order: NA

ESTIMATED VOLUME: 2 per district

COMPUTATIONS/PROCESS: NA

ACCURACY: Within 25

SCALE: Variable (ranged as 1:25,000 or 1:50,000)

ANNOTATIONS: See attached

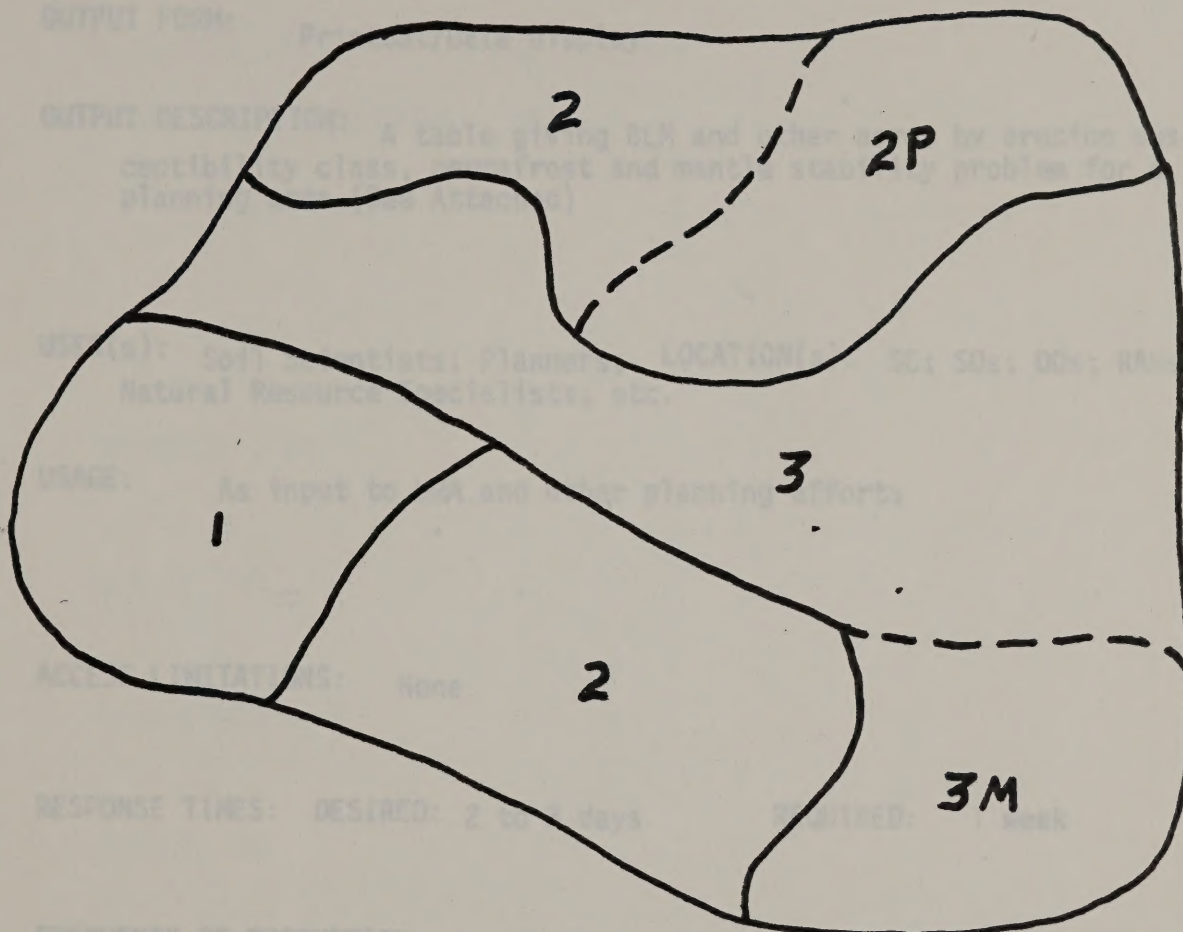
LEGEND: Standard map symbols for depicting erosion susceptibility
Classes plus areas with permanent water or water stability problems
(see legend on attachment)

REMARKS: None

EROSION SUSCEPTIBILITY OVERLAY

State (0690)(0004)
District (0543)
P.U. (1075)

Date: 2-10-67
(2302) (2306)

LEGEND

- 1 - Slight erosion susceptibility
- 2 - Moderate erosion susceptibility (4515)
- 3 - Severe erosion susceptibility
- P - Permafrost area
- M - Mantle stability problem area

Prog. Area: Watershed-Soils
Prep. By: G. Lipscomb
Date: 21 June 78 (Revision)

SO-15

OUTPUT DESCRIPTION
Page 1 of 2

OUTPUT TITLE: Erosion Susceptibility Tabulation

OUTPUT FORM: Printout/Data Display

OUTPUT DESCRIPTION: A table giving BLM and other acres by erosion susceptibility class, permafrost and mantle stability problem for a planning area (See Attached)

USER(s): Soil Scientists; Planners; LOCATION(s): SC; SOs; DOs; RAHs; etc.
Natural Resource Specialists; etc.

USAGE: As input to URA and other planning efforts

ACCESS LIMITATIONS: None

RESPONSE TIMES: DESIRED: 2 to 3 days REQUIRED: 1 week

FREQUENCY OF PRODUCTION: Quarterly at district office

DEPENDENCIES: None

REQUEST PARAMETERS: State, Administrative (100-0004) or
State, Geographic (100-0690);
District, Administrative (100-0543);
County, etc. (100-0546)
Planning Unit (100-1075).

Watershed-2071a
E. J. Jackson
2/ June 18 (revision)
Prog. Area:
Prog. By:
Date:

OUTPUT DESCRIPTION
Page 1 of 2

20-72

OUTPUT TITLE: Erosion Susceptibility Tabulation
OUTPUT FORM: Printout/Map Display

OUTPUT DESCRIPTION: A table giving SLM and other scores by erosion sus-
ceptibility class, watershed and maple stability problem for a
planning area (See Attached)

USER(s): Soil Scientists; Planners; LOCATION(s): SC; SO; DO; BAH; etc.
Natural Resource Specialists, etc.

USAGE: As input to UBA and other planning efforts

ACCESS LIMITATIONS: None

RESPONSE TIMES: DESIRED: 2 to 3 days
REQUIRED: 1 week

FREQUENCY OF PRODUCTION: Quarterly at district office

DEPENDENCIES: None

REQUEST PARAMETERS: State, Administrative (100-0604) or
State, Geographic (100-0690);
District, Administrative (100-0543);
County, etc. (100-0546)
Planning Unit (100-1078).

OUTPUT DESCRIPTION

Page 2 of 2

OUTPUT TITLE: Erosion Susceptibility Tabulation

SORT ORDER: Identical to sequence of Request Parameters.

ESTIMATED VOLUME: 3 per district

COMPUTATIONS/PROCESSES: NA

ACCURACY: NA

SCALE: NA

ANNOTATIONS: NA

LEGEND: NA

REMARKS: None

OUTPUT DESCRIPTION
Page 2 of 2

OUTPUT TITLE: Erosion Susceptibility Tabulation

NOTE: Identical to sequence of Request Parameters.

ESTIMATED VALUE: 3 per district

COMPUTATIONS/PROCESS: NA

ACCURACY: NA

SCALE: NA

ANNOTATIONS: NA

LEGEND: NA

REMARKS: None

State (0690) (0004); County (0546);
District (0543); P.U. (1075).

Date: 2-10-77 (2302) (2306)

Erosion Susceptibility Tabulation

Classification	Land Status			
	BLM Acres	Other Acres	Total Acres	% of Total
<u>Susceptibility</u>				
<u>Classes</u>			P	P
Slight	50,000 (4669)	3,000 (4672)	53,000	28
Moderate	100,000 (4670)	4,200 (4673)	104,200	55
Severe (4515)	30,000 (4671)	1,000 (4674)	31,000	17
Unclassified (4800)	-	-	-	-
Totals P	180,000	8,200	188,200 P	100 P
Permafrost	(4675)	(4676)	-	-
Mantle	5,000	-	5,000	3
Stability	(4677)	(4678)		
Problems			P	P

SO-16

Prog. Area: Watershed-Soils
Prep. By: G. Lipscomb
Date: 21 June 78 (Revision)

OUTPUT DESCRIPTION
Page 1 of 2

OUTPUT TITLE: Fragile Area Overlay

OUTPUT FORM: Map/Graphic Display

OUTPUT DESCRIPTION: A graphic display of fragile areas identified within a planning area (See Attached)

USER(s): Soil Scientist; Planners; LOCATION(s): SC; SOs; DOs; RAHs; etc.
Natural Resource Specialist; etc.

USAGE: As input to URA and other planning efforts

ACCESS LIMITATIONS: None

RESPONSE TIMES: DESIRED: 2 to 3 days REQUIRED: 1 week

FREQUENCY OF PRODUCTION: Monthly for soil scientist/planner at DO to annually for others

DEPENDENCIES:

None

REQUEST PARAMETERS: State, Administrative (100-0004) or
State, Geographic (100-0690);
District, Administrative (100-0543);
County, etc. (100-0546);
Planning Unit (100-1075);
A set of coordinates
(e.g., Latitude (127-1236)
and Longitude (127-1237); Rectangular
Survey (127-1695, 1699, 1703, 2506, 2904).

Prog. Area: Watershed-2012
Prog. By: E. L. Liscamp
Date: 21 June 78 Revision

20-76

OUTPUT DESCRIPTION
Page 1 of 2

OUTPUT TITLE: Fragile Area Overlay
OUTPUT FORM: Map/graphic display

OUTPUT DESCRIPTION: A graphic display of fragile areas identified within a planning area (See Attached)

USER(s): Soil Scientist; Planners; LOCATION(s): SC; SO2; SO3; RAN; etc.
Natural Resource Specialist; etc.

USAGE: As input to URA and other planning efforts

ACCESS LIMITATIONS: None

RESPONSE TIMES: DESIRED: 2 to 3 days
REQUIRED: 1 week

FREQUENCY OF PRODUCTION: Monthly for soil scientist/planner as to be annually for others

DEPENDENCIES:

None

REQUEST PARAMETERS: State, Administrative (100-0004) or
State, Geographic (100-0890);
District, Administrative (100-0843);
County, etc. (100-0545);
Planning Unit (100-1075);
A set of coordinates
(e.g., Latitude (127-1235)
and Longitude (127-1237); Rectangular
Survey (127-1685, 1689, 1703, 2504, 2504).

SO-16

OUTPUT DESCRIPTION
Page 2 of 2

OUTPUT TITLE: Fragile Area Overlay

SORT ORDER: Identical to sequence of request parameters

ESTIMATED VOLUME: 2 per district

COMPUTATIONS/PROCESSES:
None

ACCURACY: Within 5%

SCALE: Variable (filed at 1:24,000 or 1:62,500)

ANNOTATIONS: See Attached

LEGEND: Standard legend for types of fragile areas (See legend on attached output)

REMARKS:

20-16

OUTPUT TITLE: Fridge Area Overlay

Sort Order: Identical to sequence of request parameters

ESTIMATED VOLUME: 1 per district

COMPUTATIONS/PROCESS:

None

ACCURACY: Within 25

SCALE: Variable (ranging at 1:25,000 or 1:50,000)

ANNOTATIONS: See Attached

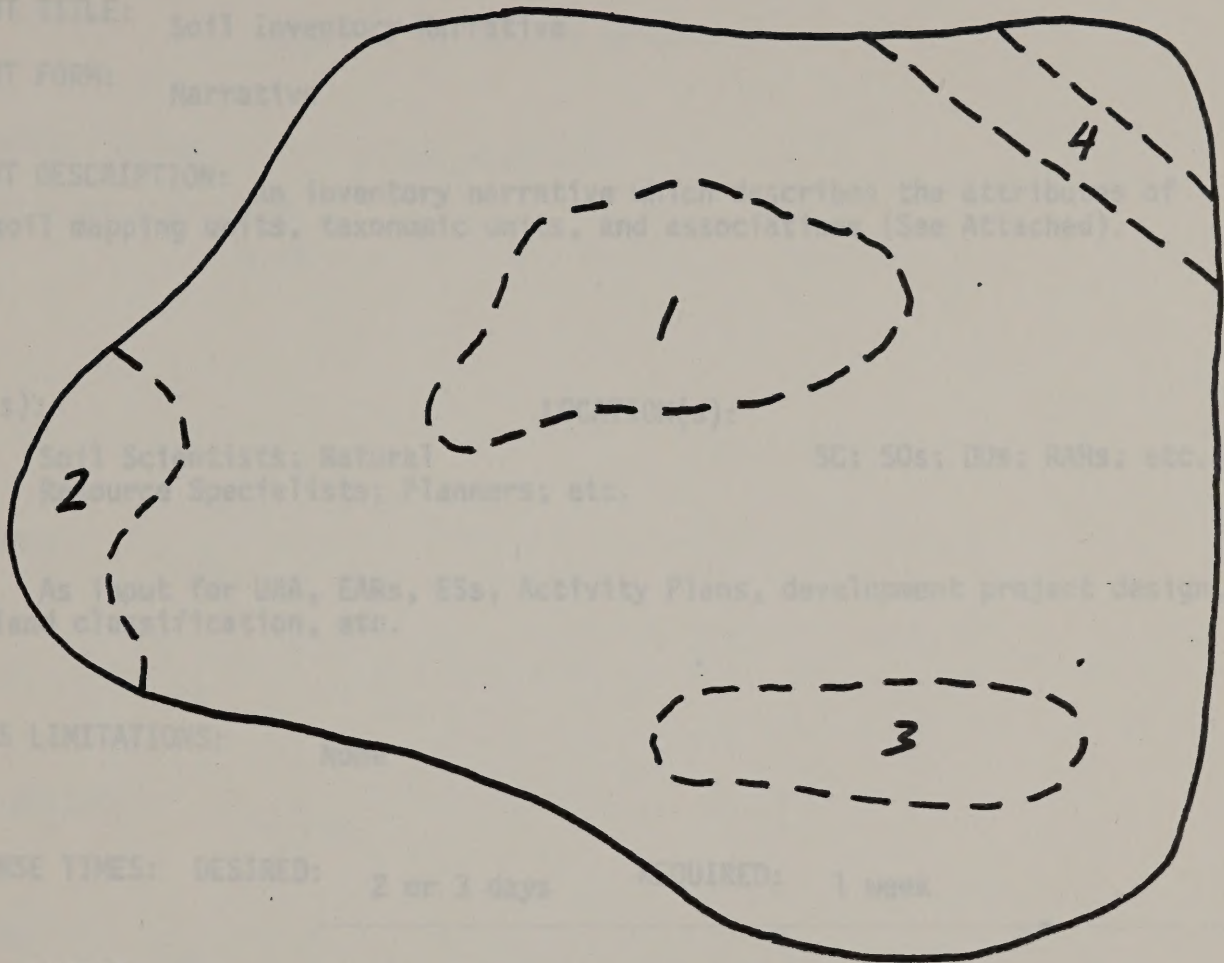
LEGEND: Standard legend for types of fridge areas (see legend on attached output)

REMARKS:

FRAGILE AREA OVERLAY

State (0690)(0004)
District (0543)
P.U. (1075)

Date: (2302) (2306)

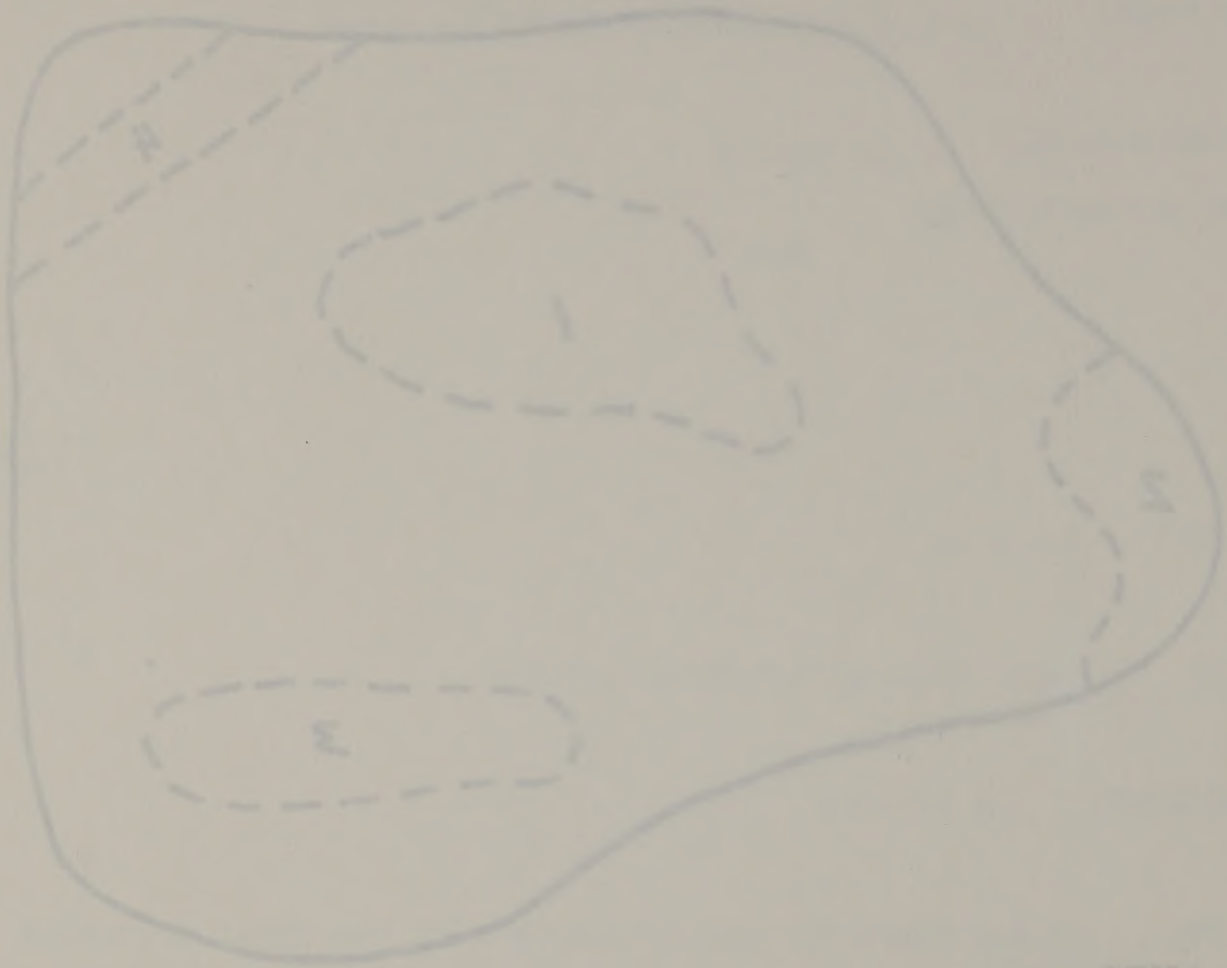
LEGEND

- 1 - Landslide hazard area in Tye sandstone
- 2 - Shallow soil area (4681)
- 3 - Steep south exposure
- 4 - Fault zone

FUGITIVE AREA OVERLAY

Date: 12/20/12 (12/20/12)

State (0000) (0000)
 District (0000)
 P.O. (0000)



LEGEND

- 1 - Landfill site in 7th ward
- 2 - Shallow soil area
- 3 - Steep south exposure
- 4 - Fault zone

SO-17

Prog. Area: Watershed-Soils
Prep. By: G. Lipscomb
Date: 21 June 78 (Revision)

OUTPUT DESCRIPTION
Page 1 of 2

OUTPUT TITLE: Soil Inventory Narrative

OUTPUT FORM: Narrative

OUTPUT DESCRIPTION: An inventory narrative which describes the attributes of soil mapping units, taxonomic units, and associations (See Attached).

USER(s):

LOCATION(s):

Soil Scientists; Natural
Resource Specialists; Planners; etc.

SC; SOs; DOs; RAHs; etc.

USAGE:

As input for URA, EARs, ESs, Activity Plans, development project design, land classification, etc.

ACCESS LIMITATIONS:

None

RESPONSE TIMES: DESIRED:

2 or 3 days

REQUIRED:

1 week

FREQUENCY OF PRODUCTION:

Monthly at District Office

DEPENDENCIES:

None

REQUEST PARAMETERS:

State, Geographic (100-0690); District, Administrative (100-0543); Name, Soil Inventory Area (141-4600); Planning Unit (100-1075)

WS-30

Prog. Area: Waterways-2012
Prog. By: G. J. [unclear]
Date: 21 June 78 (Houston)

50-17

OUTPUT DESCRIPTION
Page 1 of 2

OUTPUT TITLE: Soil Inventory Narrative
OUTPUT FORM: Narrative

OUTPUT DESCRIPTION: An inventory narrative which describes the attributes of
-soil mapping units, taxonomic units, and associations (see Attached).

USER(s):
LOCATION(s):
Soil Scientists; Natural
Resource Specialists; Planners; etc.
SC; SOC; DSS; RANS; etc.
USAGE:
As input for UVA, RAN, etc., Activity Plans, development project design,
land classification, etc.

ACCESS LIMITATIONS:
None

RESPONSE TIMES: DESIRED: 2 or 3 days
REQUIRED: 1 week

FREQUENCY OF PRODUCTION:
Monthly at District Office

DEPENDENCIES:
None

REQUEST PARAMETERS: State, Geographic (100-0000); District, Administrative
(100-0040); Name, Soil Inventory Area (141-4800); Planning Unit (100-1075)

S0-17

OUTPUT DESCRIPTION
Page 2 of 2

S0-17

OUTPUT TITLE: Soil Inventory Narrative

SORT ORDER: Identical to request parameters

ESTIMATED VOLUME: 30 per district

COMPUTATIONS/PROCESSES:
None.

Mapping Units:

ACCURACY:

NA

SCALE:

NA

ANNOTATIONS:

NA

LEGEND:

NA

REMARKS:

None

20-17

OUTPUT TITLE:

Self Inventory Narrative

SENT ORIGIN:

Identical to request parameters

ESTIMATED VALUE:

30 per district

COMPUTATION/PROCESS:

None

ACCURACY:

NA

SCALE:

NA

ANNOTATIONS:

NA

LEGEND:

NA

REMARKS:

None

OUTPUT DESCRIPTION
Page 1 of 2OUTPUT TITLE: Erosion Susceptibility Narrative
OUTPUT FORM: Narrative SOIL INVENTORY NARRATIVE

OUTPUT DESCRIPTION:

State: (0690) (0004) Date: (2302) (2306)
District: {0543}
Name, Soil Inventory Area: {4600}

Mapping Units:

806-R/VW 1,840 acres. Slopes dominantly are southerly and about cent of the area has gradients of 0 to 10 percent and 30 percent has gradients of 10 to 35 percent. This unit contains about 80 percent of the shallow 806 soils and 20 percent of {R} rock land.

Inclusions consist of the moderately deep 809 soils and what poorly-drained unclassified soils in drainageways.

806-R/X 1,730 acres. Slopes dominantly are southerly and have gradients of 35 to 60 percent. This unit contains about 75 percent of shallow 806 soils and 25 percent of {R} rock land.

Inclusions consist of the moderately deep 809 soils.
(4549)(4550)(4566)(4646)(4668)

DEPENDENCIES:

REQUEST PARAMETERS: State, Administrative (100-0004) or State, Geographic (100-0690); District, Administrative (100-0543); Planning Unit (100-1079)

SOIL INVENTORY NARRATIVE

Date: (2305) (2306)

Scale: (1000) (1000)

Project: (0245)

Name: Soil Inventory Area: (4600)

Geologic Units:

80L-RVW 1.540 acres. Slopes dominantly are southerly and about 10 percent of the area has gradient of 0 to 10 percent and 30 percent has gradient of 10 to 35 percent. This unit contains about 50 percent of the shallow 80L soils and 50 percent of (R) rock land.

Inclusions consist of the moderately deep 80F soils and what poorly-drained unclassified soils in drainageways.

80L-RX 1.730 acres. Slopes dominantly are southerly and have gradient of 35 to 40 percent. This unit contains about 75 percent of shallow 80L soils and 25 percent of (R) rock land.

Inclusions consist of the moderately deep 80F soils.
(2305)(2306)(2307)(2308)

SO-18

Prog. Area: Watershed-Soils
Prep. By: G. Lipscomb
Date: 21 June 78 (Revision)

OUTPUT DESCRIPTION
Page 1 of 2

OUTPUT TITLE: Erosion Susceptibility Narrative

OUTPUT FORM: Narrative

OUTPUT DESCRIPTION: A URA Step 2 narrative describing the erosion susceptibility of the soils within a planning area.

USER(s): Soil Scientists; LOCATION(s): SOs; DOs; RAHs; etc.
Natural Resource Specialists;
Planners; etc.

USAGE: As input to Step 2 of URA

ACCESS LIMITATIONS: None

RESPONSE TIMES: DESIRED: 2 or 3 days REQUIRED: 1 week

FREQUENCY OF PRODUCTION: Monthly for soil scientists at DO to annually for soil scientists at SO.

DEPENDENCIES: None

REQUEST PARAMETERS: State, Administrative (100-0004) or State, Geographic (100-0690); District, Administrative (100-0543); Planning Unit (100-1075)

Prog. Area: Watershed-2012
 Prog. By: S. Lindquist
 Date: 21 June 78 (Revision)

OUTPUT DESCRIPTION
 Page 1 of 2

OUTPUT TITLE: Erosion Susceptibility Narrative
 OUTPUT FORM: Narrative

OUTPUT DESCRIPTION: A two step 2 narrative describing the erosion susceptibility of the soil within a planning area.

USER(s): Soil Scientists; Natural Resource Specialists; Planners; etc.
 LOCATION(s): SDs; TOS; SAHs; etc.

USAGE: As input to Step 2 of DRA

ACCESS LIMITATIONS: None

RESPONSE TIMES: DESIRED: 1 or 2 days
 REQUIRED: 1 week

FREQUENCY OF PRODUCTION: Monthly for soil scientists at DO to annually for soil scientists at SD.

DEPENDENCIES: None

REQUEST PARAMETERS: State, Administrative (100-0001) or State, Geographic (100-0002); District, Administrative (100-0003); Planning Unit (100-0004)

OUTPUT DESCRIPTION
Page 2 of 2

SO-18

SO-18

OUTPUT TITLE:

Erosion Susceptibility Narrative

SORT ORDER:

Identical to request parameters.

ESTIMATED VOLUME:

1 per District

COMPUTATIONS/PROCESSES:

None.

EROSION SUSCEPTIBILITY NARRATIVE

State: (0004) (0640)

Date: (2302) (2305)

District: (0543)

Planning Unit: No Name (1075)

ACCURACY:

NA

SCALE:

NA

ANNOTATIONS:

NA

LEGEND:

NA

REMARKS:

None

20-18

OUTPUT TITLE:

Excision Susceptibility Narrative

SHORT ORDER:

Identical to request parameters.

ESTIMATED VOLUME:

1 per District

COMPUTATIONS/PROCESS:

None.

ACCURACY:

NA

SCALE:

NA

ANNOTATIONS:

NA

LEGEND:

NA

REMARKS:

None

Proj. Area: Watershed, Gully
Prep. By: S. J. [unclear]
Date: 21 June 78 (revision)

SO-18

OUTPUT DESCRIPTION
Page 1 of 2

OUTPUT TITLE: Fragile Area Narrative

OUTPUT FORM: Narrative

OUTPUT DESCRIPTION: A USA Step 2 narrative describing fragile areas for
a planning area (See Attached).

EROSION SUSCEPTIBILITY NARRATIVE

USER(s): State: {0004} {0690} Date: (2302) (2306)
District: {0543}
Planning Unit: No Name (1075)

USAGE:

Erosion Susceptibility is
.....
(4679)

ACCESS LIMITATIONS: None

Permafrost is found
.....
(4679)

FREQUENCY OF PRODUCTION:

Mantle stability problems consist of
.....
(4679)

DEPENDENCIES:

REQUEST PARAMETERS:

State, Administrative (100-0004) or State, Geographic
(100-0001); District, Administrative (100-0543); Planning Unit (100-1075)

EROSION SUSCEPTIBILITY NARRATIVE

Series: 400007 (04-07)
B: 400007 (04-07)
Planning Unit: No. 1000 (10-07)

.....
Erosion susceptibility is
.....
(04-07)

.....
Permeability is found
.....
(04-07)

.....
Particle size distribution consists of
.....
(04-07)

SO-19

Prog. Area: Watershed-Soils
Prep. By: G. Lipscomb
Date: 21 June 78 (Revision)

OUTPUT DESCRIPTION
Page 1 of 2

OUTPUT TITLE: Fragile Area Narrative

OUTPUT FORM: Narrative

OUTPUT DESCRIPTION: A URA Step 2 narrative describing fragile areas for a planning area (See Attached).

USER(s): Soil Scientist; Natural Resource Specialist; Planner; etc.
LOCATION(s): SOs; DOs; RAHs; etc.

USAGE: As input to Step 2 of URA

ACCESS LIMITATIONS: None

RESPONSE TIMES: DESIRED: 2 or 3 days
REQUIRED: 1 week

FREQUENCY OF PRODUCTION: Monthly for soil scientists at DO to annually for soil scientists at SO.

DEPENDENCIES: None

REQUEST PARAMETERS: State, Administrative (100-0004) or State, Geographic (100-0690); District, Administrative (100-0543); Planning Unit (100-1075)

Project Area: Watershed-Cells
Project By: G. Thompson
Date: 21 June 78 (Revision)

20-18

OUTPUT DESCRIPTION
Page 1 of 2

OUTPUT TITLE: Fragile Area Narrative

OUTPUT FORM: Narrative

OUTPUT DESCRIPTION: A URA Step 2 narrative describing fragile areas for a planning area (See Attached).

USER(s): Soil Scientist; Natural Resource Specialist; Planner; etc.
LOCATION(s): 20a; 20b; RAHs; etc.

USAGE: As input to Step 2 of URA

ACCESS LIMITATIONS: None

RESPONSE TIME: DESIRED: 2 or 3 days
REQUIRED: 1 week

FREQUENCY OF PRODUCTION: Monthly for soil scientists at 10 to annually for soil scientists at 20.

DEPENDENCIES: None

REQUEST PARAMETERS: State, Administrative (100-0004) or State, Geographic (100-0050); District, Administrative (100-0243); Planning Unit (100-1075)

SO-19

OUTPUT DESCRIPTION
Page 2 of 2

OUTPUT TITLE:

Fragile Area Narrative

SORT ORDER:

Identical to request parameters.

ESTIMATED VOLUME: 1 per District

COMPUTATIONS/PROCESSES:

None.

ACCURACY:

NA

SCALE:

NA

ANNOTATIONS:

NA

LEGEND:

NA

REMARKS:

None

OUTPUT TITLE:

Frangible Area Narrative

SORT ORDER:

Identical to request parameters.

ESTIMATED VOLUME: 1 per District

COMPUTATIONS/PROCESS:

None.

ACCURACY:

NA

SCALE:

NA

ANNOTATIONS:

NA

LEGEND:

NA

REMARKS:

None

VD-16

Prog. Area: Watershed v/c
Prep. By: G. L. P. 11/20/80
Date: 11/20/80 (Revision)
SO-19

OUTPUT DESCRIPTION
Page 1 of 2

OUTPUT TITLE: Land Treatments and Management Facilities Overlay

OUTPUT FORM: Map/Graphic Display

OUTPUT DESCRIPTION: FRAGILE AREA NARRATIVE

State: {0004} {0690}
District: {0543}
Planning Unit: {1075}

Date: (2302) (2306)

USER(s): A severe landslide area exists
.....
(4680) (4681)

ISSUES: As input to Step 2 BRA; May duplicate output of other systems such as JOR.

The shallow soils on the west side
.....
(4680) (4681)

RESPONSE TIMES: DESIRED: 1 to 3 days REQUIRED: 1 week

FREQUENCY OF PRODUCTION: Monthly for DB specialists/planners to annually for others

DEPENDENCIES: None

REQUEST PARAMETERS:
State, Administrative (100-0004) or
State, Geographic (100-0690)
District, Administrative (100-0543);
Planning Unit (100-1075);
A set of coordinates (e.g., latitude (127-1235)
and longitude (27-1237); Rectangular Survey (127-1695,
1699, 1703, 2506, 2904)

FI-02

FRAGILE AREA NARRATIVE

Date: (3005) (3005)

Scatter: (0000) (0000)
District: (0000)
Planning Unit: (0000)

A severe landslide area exists
(0000) (0000)

The erosion exists on the west side
(0000) (0000)

VO-16

Prog. Area: Watershed-V/C
Prep. By: G. Lipscomb
Date: 21 June 78 (Revision)

OUTPUT DESCRIPTION

Page 1 of 2

OUTPUT TITLE: Land Treatments and Management Facilities Overlay

OUTPUT FORM: Map/Graphic Display

OUTPUT DESCRIPTION: A graphic display of land treatment and management facilities located within a planning unit (See Attached).

USER(s): Watershed Specialist; LOCATION(s): SOs; DOs; RAHs; etc.
Natural Resource Specialist;
Planners, etc.

USAGE: As input to Step 2 URA; May duplicate output of other systems such as JDR.

ACCESS LIMITATIONS: None

RESPONSE TIMES: DESIRED: 1 to 3 days REQUIRED: 1 week

FREQUENCY OF PRODUCTION: Monthly for DO specialists/planners to annually for others

DEPENDENCIES: None

REQUEST PARAMETERS: State, Administrative (100-0004) or
State, Geographic (100-0690)
District, Administrative (100-0543);
Planning Unit (100-1075);
A set of coordinates (e.g., latitude (127-1236)
and longitude (27-1237); Rectangular Survey (127-1695,
1699, 1703, 2506, 2904)

OUTPUT DESCRIPTION
Page 1 of 2

OUTPUT TITLE: Land Treatment and Management Facilities Overlay

OUTPUT FORM:

Map/Graphic Display

OUTPUT DESCRIPTION: A graphic display of land treatment and management facilities located within a planning unit (See Attached).

USER(s): Watershed Specialist;
Natural Resource Specialist;
Planners, etc.
LOCATION(s): S01; D01; R01; etc.

USAGE: As input to Step 2 USA; May duplicate output of other systems such as JOR.

ACCESS LIMITATIONS: None

RESPONSE TIME: DESIRED: 1 to 3 days
REQUIRED: 1 week

FREQUENCY OF PRODUCTION: Monthly for DO specialists/planners to annually for others

DEPENDENCIES:

None

REQUEST PARAMETERS:

State, Administrative (100-0001) or
State, Geographic (100-0002)
District, Administrative (100-0003);
Planning Unit (100-1001);
A set of coordinates (e.g., latitude (123-1236)
and longitude (123-1237); Rectangular Survey (123-1002)
1001, 1701, 2001, 2004

VO-16

OUTPUT DESCRIPTION

Page 2 of 2

OUTPUT TITLE: Land Treatments and Management Facilities Overlay

SORT ORDER: Identical to sequences of request parameters

ESTIMATED VOLUME: 3 per District

COMPUTATIONS/PROCESSES: None

ACCURACY: Within 5%

SCALE: Variable (filed at 1:24,000, 1:62,500, or 1:125,000)

ANNOTATIONS: (See attached sample of output)

LEGEND: Standard map symbols for identifying the location of land treatments and management facilities (see legend on sample attached).

REMARKS: None

OUTPUT TITLE: Land Treatment and Management Facilities Overlay

NOTE: Identical to summary of request parameters

ESTIMATED VOLUME: 5 per District

COMPUTATIONS/PROCESS: None

ACCURACY: Within 25

SCALE: Variable (ranging at 1:25,000, 1:50,000, or 1:125,000)

ANNOTATIONS: (See attached sample of output)

LEGEND: Standard map symbols for identifying the location of land treatment and management facilities (see legend on sample attached).

REMARKS: None

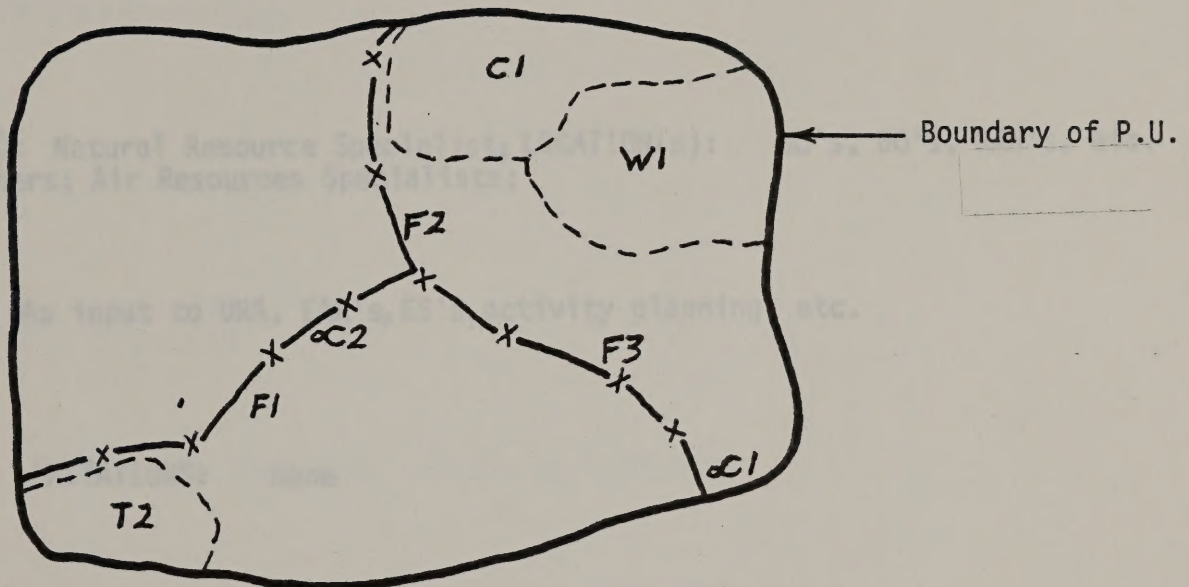
LAND TREATMENTS AND MANAGEMENT FACILITIES OVERLAY

State (0004) (0690)
 District (0543)
 P.U. (1075)

Date: (2302) (2306)

OUTPUT FORM: Map/Graphic Display

OUTPUT DESCRIPTION: A graphic display of the location of Air Resources data such as monitoring sites, or biological station sites, air basins boundaries, etc. (See Attached)



LEGEND:

- F1 Allotment A Boundary Fence
- F2 Allotment B Boundary Fence
- F3 Allotment C Boundary Fence
- C1 Chemical sagebrush manipulation
- T2 Mechanical P-J manipulation by chaining
- W1 Contour furrowing in burned sagebrush
- ⊙1 Comparison area for big sagebrush site
- ⊙2 Comparison area for P-J site

(5464)

LAND TREATMENT AND MANAGEMENT FACILITIES OVERLAY

Date: (2305) (2306)

State (0004) (0005)
 District (0003)
 P.U. (0001)



LEGEND:

- FI Affluent A boundary fence
- F2 Affluent B boundary fence
- F3 Affluent C boundary fence
- CI Chemical application treatment
- TS Mechanical P-1 treatment by chaining
- VI Contour bunding in burned sagebrush
- QV Comparison area for big sagebrush site
- QW Comparison area for P-1 site

(2001)

AO-1

Prog. Area: Watershed-Air
Prep. By: G. Lipscomb
Date: 21 June 78 (Revision)

OUTPUT DESCRIPTION
Page 1 of 2

OUTPUT TITLE: Air Resources Inventory Overlay

OUTPUT FORM: Map/Graphic Display

OUTPUT DESCRIPTION: A graphic display of the location of Air Resources data such as monitoring sites, climatological station sites, air basins boundaries, etc. (See Attached)

USER(s): Natural Resource Specialist; LOCATION(s): SO's, DO's, RAH's, etc.
Planners; Air Resources Specialists;
etc.

USAGE:

As input to URA, EAR's, ES's, activity planning, etc.

ACCESS LIMITATIONS: None

RESPONSE TIMES: DESIRED: 1 to 3 days REQUIRED: 1 week

FREQUENCY OF PRODUCTION: Quarterly for DO specialists/planners to annually for others

DEPENDENCIES:

None

REQUEST PARAMETERS: State, Administrative (100-0004) or State, Geographic (100-0690); District, Administrative (100-0543); Planning Unit (100-1075)

Prep. Area: Watershed Air
Prep. By: S. Lipscomb
Date: 21 June 78 (Revision)

OUTPUT DESCRIPTION
Page 1 of 2

OUTPUT TITLE: Air Resources Inventory Overlay

OUTPUT FORM: Map/Graphic Display

OUTPUT DESCRIPTION: A graphic display of the location of Air Resources data such as monitoring sites, climatological station sites, air basins boundaries, etc. (See Attached)

USER(s): Natural Resource Specialist; LOCATION(s): 20°N, 100°W, etc.
Planner; Air Resources Specialist;
etc.

USAGE: As input to URA, EAR, etc., activity planning, etc.

ACCESS LIMITATIONS: None

RESPONSE TIME: DESIGN: 1 to 3 days
REQUIRED: 1 week

FREQUENCY OF PRODUCTION: Quarterly for DO specialists/planners to annually
for others

DEPENDENCIES: None

REQUEST PARAMETERS: State, Administrative (100-0004) or State,
Geographic (100-0000); District, Administrative (100-0043);
Planning Unit (100-1070)

AO-1

OUTPUT DESCRIPTION
Page 2 of 2

OUTPUT TITLE: Air Resources Inventory Overlay

SORT ORDER: Identical to sequence of request parameters

ESTIMATED VOLUME: 10 per district

COMPUTATIONS/PROCESSES: None

ACCURACY: Within 5%

SCALE: Variable (filed at 1:24,000 or 1:62,500)

ANNOTATIONS: For each air basin/airshed show P.S.D. area; and for each air quality and climatological station site show parameters and period of record.

LEGEND:

Standard map symbols to key air resources information displayed on overlay (see legend on attached sample).

REMARKS:

None

OUTPUT TITLE: Air Resources Inventory Overlay

SORT ORDER: Identical to sequence of request parameters

ESTIMATED VOLUME: 10 per district

COMPUTATIONS/PROCESSES: None

ACCURACY: Within 25

SCALE: Variable (ranged at 1:25,000 or 1:62,500)

ANNOTATIONS: For each air resource shown show P.S.D. area; and for each air quality and climatological station site show parameters and period of record.

LEGEND:

Standard map symbols for key air resources information displayed on overlay (see legend on attached sample).

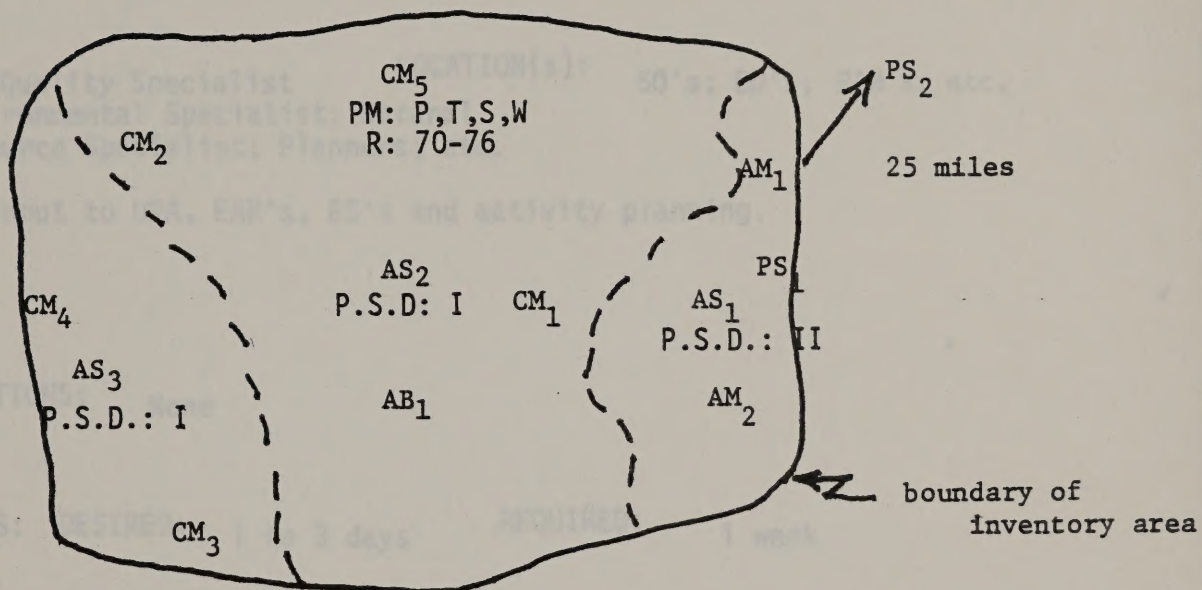
REMARKS:

None

AIR RESOURCES INVENTORY OVERLAY

State: (0004) (0690)
 District: (0543)
 Planning Unit: (1075)

Date: (2302)(2306)



Legend (air resource inventory)

AM ₁	Air Quality Monitoring Site No. 001 (4910)	(4978)
AM ₂	Air Quality Monitoring Site No. 002	
CM ₁	Climatological Station Site No. 0001	
CM ₂	Climatological Station Site No. 0002 (8515)	
CM ₃	Climatological Station Site No. 0003	
CM ₄	Climatological Station Site No. 0004	
CM ₅	Climatological Station Site No. 0005	
PM	Parameters of Record (5377)	
R	Period of Record	

Legend (Air Basin/Airshed)

AS ₁	Sawmill Airshed, No. 1
AS ₂	Middle Airshed, No. 2
AS ₃	Clean Airshed, No. 3
AB ₁	Colorado Air Basin No. 1 (4959)
PS ₂	Point Emission Source (Coal-Fired power plant)
PS ₁	Point Emission Source (Sawmill burner)
P.S.D.	- Classification, Prevention of Significant Deterioration (4998)

AIR RESOURCES INVENTORY OVERLAY

Date: (2305)(2308)

Station (0004) (0000)
 District (0043)
 Planning Order (1072)



Legend (Air Basis/Altered)

Legend (Air Resource Inventory)

AS1	Air Quality Monitoring Site No. 001	AS1	Seventy Altered, No. 1
AS2	Air Quality Monitoring Site No. 002	AS2	Midline Altered, No. 2
AS3	Climatological Station Site No. 0001	AS3	Green Altered, No. 3
AS4	Climatological Station Site No. 0002	AS4	Colorado Air Basin No. 1 (4919)
AS5	Climatological Station Site No. 0003	AS5	Point Station Source (Coal-fired power plant)
AS6	Climatological Station Site No. 0004	AS6	Point Station Source (Seventy burner)
AS7	Climatological Station Site No. 0005	AS7	P.S.D. - Classification, Pre-venton of Significant Deterioration (4928)
AS8		PS1	
AS9		PS2	
AS10			
AS11			
AS12			
AS13			
AS14			
AS15			
AS16			
AS17			
AS18			
AS19			
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AS96			
AS97			
AS98			
AS99			
AS100			

Prog. Area: Watershed Air
Prep. By: G. Lipscomb
Date: 21 June 78 (Revision)

A0-5

OUTPUT DESCRIPTION
Page 1 of 2

OUTPUT TITLE: Yearly Frequency Distribution of Air Quality Parameters by State
OUTPUT FORM: Printout/Data Display

OUTPUT DESCRIPTION: A table displaying frequency distribution of quarterly or yearly air pollution data

USER(s): Air Quality Specialist LOCATION(s): SO's; DO's; RAH's; etc.
Environmental Specialist; Natural
Resource Specialist; Planners; etc.

USAGE: As input to URA, EAR's, ES's and activity planning.

ACCESS LIMITATIONS: None

RESPONSE TIMES: DESIRED: 1 to 3 days REQUIRED: 1 week

FREQUENCY OF PRODUCTION: Annually for DO specialist to annually for others.

DEPENDENCIES: None

REQUEST PARAMETERS: State, Administrative (100-0004) or State,
Geographic (100-0690); District, Administrative (100-0543);
Planning Unit (100-1075); Site Code Number (143-4910)

WS-45

Project: Air Quality
Phase: 501
Date: 21 June 78 (Revision)

OUTPUT DESCRIPTION
Page 1 of 2

AD-2

OUTPUT TITLE: Yearly Frequency Distribution of Air Quality Parameters by State
OUTPUT FORM: Printout/Screen Display
OUTPUT DESCRIPTION: A table displaying frequency distribution of quarterly or yearly air pollution data

USER(s): Air Quality Specialist
Environmental Specialist; Natural Resource Specialist; Planners; etc.
LOCATION(s): 501-501; 501-501; etc.
USAGE: As input to EPA, EIS, and activity planning.

ACCESS LIMITATIONS: None

RESPONSE TIMES: DESIRED: 1 to 2 days
REQUIRED: 1 week

FREQUENCY OF PRODUCTION: Annually for 501 Specialist as annually for others.

DEPENDENCIES: None

REQUEST PARAMETERS: State, Administrative (100-1004) or State Geographic (100-1005); District, Administrative (100-1006); Planning Unit (100-1007); Site Code Number (100-1008)

A0-5

OUTPUT DESCRIPTION

Page 2 of 2

OUTPUT TITLE: Yearly Frequency Distribution of Air Quality Parameters by State

SORT ORDER: Identical to sequence of request parameters

ESTIMATED VOLUME: 30 per district

COMPUTATIONS/PROCESSES: Computation of frequency distribution (quarterly or yearly) of air pollution parameter data.

ACCURACY: NA

SCALE: NA

ANNOTATIONS: NA

LEGEND: NA

REMARKS: None

OUTPUT TITLE: Yearly Frequency Distribution of Air Quality Parameters
by State

Sort Order: identical to sequence of request parameters

ESTIMATED VOLUME: 30 per district

COMPUTATION/PROCESS: Computation of frequency distribution (quarterly or yearly) of air pollution parameter data.

ACCURACY: NA

SCALE: NA

ANNOTATIONS: NA

LEGEND: NA

REMARKS: None

National Aerometric Data Bank
 Yearly Frequency Distribution (for Quarterly data, change title)
 State (31): New Jersey (0004)

(0690)
 Site Code: 31 (0004) 34 (0543) 80 (1075) 001 (4910)
 Agency/Project: A01 (4902/4905)
 Agency Type: EPA/Atmos. Surv. (4905)

Latitude: 40 D. 42 M. 00 S. (1236)
 Longitude: 070 D. 10 M. 00 S. (1237)
 UTM Zone: 19)
 UTM Northing: 4505894)- (7515)
 UTM Easting: 401435)
 Elevation Above Ground: 065 Ft. (4908)
 Elevation Above MSL: 0128 Ft. (0431)

Supporting Agency: Air Pollution Control Newark Dept of Health & Welfare (4906)
 Comments: (6954)
 County: Essex Co (0546)
 AQCP (C43): New Jersey-New York-Connecticut (4959)

(6562) Year	(4970) Qtr	Pollutant (4937) Pollutant-Method Code Method (4928) Interval (4925) & Units (4930)		(4971) Num Obs	Min Obs	10	30	Percentiles 50 70 90 95 99					Max Obs	Arith Mean	Geometric Mean	Std Dev
65		Particulate 1110191 Hi-Vol Gravimetric 24-Hour UG/CU Meter (25 C)		24	49.	73.	88.	112.	138.	210.	215.	285.	285.	123.	112.79	1.52
66		Particulate 1110191 Hi-Vol Gravimetric 24-Hour UG/CU Meter (25 C)		25	48.	56.	66.	81.	102.	165.	170.	179.	179.	96.	88.25	1.50
67		Particulate 1110191 Hi-Vol Gravimetric 24-Hour UG/CU Meter (25 C)		25	24.	38.	67.	92.	126.	160.	169.	191.	191.	98.	86.36	1.72
68		Particulate 1110191 Hi-Vol Gravimetric 24-Hour UG/CU Meter (25 C)		24	32.	41.	68.	90.	102.	161.	197.	200.	200.	93.	83.37	1.60
69		Particulate 1110191 Hi-Vol Gravimetric 24-Hour UG/CU Meter (25 C)		25	35.	44.	55.	74.	87.	98.	105.	166.	166.	74.	69.88	1.42
70		Particulate 1110191 Hi-Vol Gravimetric 24-Hour UG/CU Meter (25 C)		24	34.	58.	73.	81.	89.	122.	157.	171.	171.	86.	81.31	1.42
71		Particulate 1110191 Hi-Vol Gravimetric 24-Hour UG/CU Meter (25 C)		24	33.	56.	74.	80.	111.	137.	141.	186.	186.			

24-4000, 0000000000 (32 C)
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AO-23

Prog. Area: Watershed-Air
Prep. By: G. Lipscomb
Date: 21 June 78 (Revision)

OUTPUT DESCRIPTION
Page 1 of 2

OUTPUT TITLE: Air Quality Table by Planning Unit

OUTPUT FORM:
Printout/Data Display

OUTPUT DESCRIPTION:
A table summarizing average monthly air pollutant levels for a planning area (See Attached).

USER(s): Air Quality Specialist; LOCATION(s): SO's; DO's; RAH's; etc.
Natural Resource Specialist;
Planners; etc.

USAGE:
As input to Step 2 URA, EAR's, and ES's.

ACCESS LIMITATIONS: None

RESPONSE TIMES: DESIRED: 1 to 3 days REQUIRED: 1 week

FREQUENCY OF PRODUCTION:
Annually for RAH/DO Specialists to annually
for others

DEPENDENCIES: None

REQUEST PARAMETERS: State, Administrative (100-0004) or State, Geographic (100-0690); District, Administrative (100-0543); Planning Unit (100-1075)

OUTPUT DESCRIPTION
Page 1 of 2

OUTPUT TITLE:

Air Quality Data for Planning Unit

OUTPUT FORM:

Printout/Slide Display

OUTPUT DESCRIPTION:

A table summarizing average monthly air pollutant levels for a planning area (see attached).

USER(s):

Air Quality Specialist;
Natural Resource Specialist;
Planners; etc.

USAGE:

As input to Step 2 (RA's, EA's, and ES's)

ACCESS LIMITATIONS:

None

RESPONSE TIME: DESIRED:

1 to 2 days

REQUIRED:

1 week

FREQUENCY OF PRODUCTION:

Annually for BLM/DO Specialists to annually
for others

DEPENDENCIES:

None

REQUEST ORIGINATOR: State, Administrative (100-0004) or State Geographic
(100-0250); District, Administrative (100-0243); Planning Unit (100-1075)

A0-23

OUTPUT DESCRIPTION
Page 2 of 2

OUTPUT TITLE: Air Quality Table by Planning Unit

SORT ORDER: Identical to sequence of request parameters

ESTIMATED VOLUME: 2 per District

COMPUTATIONS/PROCESSES: Computation of average monthly air pollutant levels for air pollution parameters from recorded values (hourly, daily, etc.) for monitoring station records.

ACCURACY:

NA

SCALE:

NA

ANNOTATIONS:

NA

LEGEND:

NA

REMARKS:

None

WS-49

OUTPUT TITLE: Air Quality Data by Planning Unit

SORT ORDER: Identical to sequence of request parameters

ESTIMATED VOLUME: 2 per District

COMPUTATION/PROCESS: Computation of average monthly air pollutant levels
(for air pollution parameters from recorded values (hourly, daily, etc.)
for monitoring station records.

ACCURACY:

NA

SCALE:

NA

ANNOTATIONS:

NA

LEGEND:

NA

REMARKS:

None

MS-50

AIR QUALITY TABLE BY PLANNING UNIT

State (0004) (0690)
District (0543)
P.U. (1075)

Date: (2302)(2306)

Month	Average Monthly Pollutant Level (ug/m ³) (4930)		
	Particulates	NO ₂ ← (4937) → SO ₂	HC
Jan			
Feb			
Mar			
Apr			
May			
Jun			
Jul (P)			
Aug		← (4985) →	
Sept			
Oct			
Nov			
Dec			
Annual			

Prog. Area: Watershed-Geol.
Prep. By: G. Lipscomb
Date: 21 June 78 (Revision)

OUTPUT DESCRIPTION
Page 1 of 2

OUTPUT TITLE: GEOLOGIC HAZARD OVERLAY

OUTPUT FORM: Map/Graphic Display

OUTPUT DESCRIPTION: A graphic display of geologic hazards for a planning area. (See attached.)

USER(s): Geologist; Natural Resource Specialist; Planners; etc. LOCATION(s): SO's, DO's; RAH's; etc.

USAGE: As input to URA, EAR's, ES's, activity plans, and project design.

ACCESS LIMITATIONS: None

RESPONSE TIMES: DESIRED: 1 to 3 days REQUIRED: 1 week

FREQUENCY OF PRODUCTION: Twice per month for RAH/DO specialists to annually for others.

DEPENDENCIES: None

REQUEST PARAMETERS: State, Administrative (100-0004) or State, Geographic (100-0690); District, Administrative (100-0543); Planning Unit (100-1075)

GO-2

OUTPUT DESCRIPTION
Page 2 of 2

OUTPUT TITLE: GEOLOGIC HAZARD OVERLAY

SORT ORDER: Identical to sequence of request parameters.

ESTIMATED VOLUME: 3 per District

COMPUTATIONS/PROCESSES: None

ACCURACY: Within 5%

SCALE: Variable (filed at 1:24,000, 1:62,500, or 1:125,000)

ANNOTATIONS: (See attached sample output.)

LEGEND: Standard map symbols to depict such geologic hazards as landslides, floods, etc.

REMARKS: None

GEOLOGIC HAZARD OVERLAY

State (0004)(0690)
District (0543)
P.U. (1075)

OUTPUT DESCRIPTION
Page 1 of 2

OUTPUT TITLE: TABLE OF DESCRIPTIVE WELL DATA

OUTPUT FORM: PRINTOUT/DATA DISPLAY

OUTPUT DESCRIPTION: A table summarizing information for a water well. (See attached.)

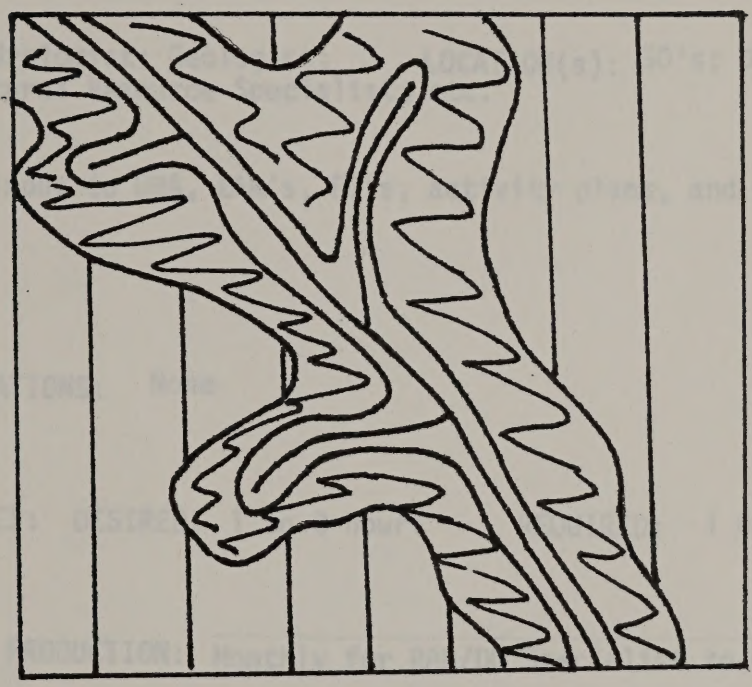
USER(s): [unclear] (s): 0' 0" 0' 0" 0' 0" 0' 0" etc.

USAGE: As [unclear] plan, and project design.

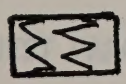
ACCESS LIMITATION: None

RESPONSE TIME: [unclear]

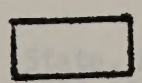
FREQUENCY OF [unclear] Quarterly for others



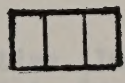
LEGEND



landslide
susceptibility



flood
susceptibility
(5129)



no landslide/flood
susceptibility

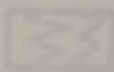
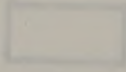
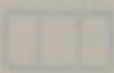
Geology Map
 Date: 12/15/2004

Project: 10/10/04

Scale: 1:1000
 District: 10/10/04
 P.U. 10/10/04



LEGEND

-  Landfill susceptibility
-  Flood susceptibility (572)
-  no landfill susceptibility

OUTPUT DESCRIPTION
Page 1 of 2

OUTPUT TITLE: TABLE OF DESCRIPTIVE WELL DATA

OUTPUT FORM: Printout/Data Display

OUTPUT DESCRIPTION: A table summarizing information for a water well. (See attached.)

USER(s): Hydrologist; Geologist; LOCATION(s): SO's; DO's; RAH's; etc.
Natural Resource Specialist; etc.

USAGE: As input to URA, EAR's, ES's, activity plans, and project design.

ACCESS LIMITATIONS: None

RESPONSE TIMES: DESIRED: 1 to 3 hours REQUIRED: 1 day

FREQUENCY OF PRODUCTION: Monthly for RAH/DO Specialist to Quarterly for others

DEPENDENCIES: None

REQUEST PARAMETERS: State, Administrative (100-0004) or State, Geographic (100-0690); District, Administrative (100-0543); Number, Ground-Water Site (145-5149)

GO-5

OUTPUT DESCRIPTION
Page 2 of 2

OUTPUT TITLE: TABLE OF DESCRIPTIVE WELL DATA

SORT ORDER: Identical to sequence of request parameters

ESTIMATED VOLUME: 4 per District

COMPUTATIONS/PROCESSES: None

ACCURACY: NA

SCALE: NA

ANNOTATIONS: NA

LEGEND: NA

REMARKS: None

OUTPUT TITLE: TABLE OF DERIVATIVE WELL DATA

SORT ORDER: Identical to sequence of request parameters

ESTIMATED VOLUME: 4 per District

COMPUTATIONS/PROCESS: None

ACCURACY: NA

SCALE: NA

ABRUTATIONS: NA

LEGEND: NA

REMARKS: None

TABLE OF DESCRIPTIVE WELL DATA

MS-56

State (0004) (0690)	District (0543)	Well Number (5149)	Owner or Name (5153)	Date (5105)	I N V E N T O R Y	D D A R T I E L E D	M D E R T I H L O L D E D	D W E E P L T L H	D C E A P S T E H D	W F E I L N I S H	D I A M E T E R	P O W E R	L M I E T H O D	W U A S T E R	W U E S L E	A O L F T I L T S U D E	C A H N E A M L I Y C S A E L S	P D U A M T P A I N G	L O G D A T A	
						(Feet) (5184)	(Feet) (5181)	(Feet) (5174)	(Feet) (5173)	(In.) (5187)	(In.) (5163)	(5182)	(5195)	(5186)	(5179)	(Feet) (0431)	(5157)	(5106)	(5160)	
		06N/12W-04A01 S		1973		1950	R	504	288	F	12			N	U	U	2540		P	D
		06N/12W-04A02 S	M. Harding	1963								5		S	H	W	2533			
		06N/12W-04A03 S	McIntire	1963		1957						5		S	U	U	2534			
		06N/12W-04J01 S		1963								5		S	H	W	2563			
		06N/12W-04J02 S		1963												Z	2567			
		06N/12W-04R01 S	Gospel Church	1963								5		S	H	W	2576			
		06N/12W-05A01 S	White Fence Fms	1963		1948	H				14	V		T	P	W	2533	P	P	D
		06N/12W-05A02 S	White Fence Fms	1963											P	W	2533	M		
		06N/12W-06B01 S	McDonald	1963							4	6		P	H	W	2534			
		06N/12W-06M01 S	Quartz Hill Cwd	1963							12			N	U	U	2553			
		06N/12W-07A01 S	Sunnyside Farms	1963		1951	H	432	276	F	14	V		T	P	W	2597		P	D
		06N/12W-07A02 S	Sunnyside Farms	1963		1954	H	456	259	F	14	5		T	P	W	2589		P	D
		06N/12W-10C01 S	U.S. Government	1963												Z	2588			
		06N/12W-11D01 S	U.S. Government	1963								V		T	U	U	2565			
		06N/13W-01F01 S		1963		1919										Z	2523		P	D
		06N/13W-02F01 S	J. Hunter	1963		1886	D				36			N	U	U	2568			
		06N/13W-02N01 S	Godde Bros.	1963		1937					10	T		T	U	U	2725		P	
		06N/13W-02N02 S	J. Godde	1963		1920					12			N	U	U	2654			
		06N/13W-02P01 S		1963							10			N	U	U	2702			
		06N/13W-02Q01 S	J. Godde	1963		1930	D				48			N	U	U	2664			
		06N/13W-02Q02 S	J. Godde	1963		1936	H				8	5		S	H	W	2662		P	
		06N/13W-02Z01 S	J. Godde	1963												Z	2702			
		06N/13W-02Z02 S	Latrell	1963		1900										Z	2632			
		06N/13W-02Z03 S		1963												Z	2679			
		06N/13W-02Z04 S	J. Godde	1963			D									Z	2614			
		06N/13W-02Z05 S		1963		1915										Z	2607			
		06N/13W-02Z06 S		1963		1916										Z	2531			

GO-5

MS-56

GO-5

OUTPUT DESCRIPTION
Page 1 of 2

OUTPUT TITLE: TABLE OF DESCRIPTIVE SPRING DATA

OUTPUT FORM: Printout/Data Display

OUTPUT DESCRIPTION: A table summarizing information for a spring (see attached).

USER(s): Hydrologist; Geologist; LOCATION(s): SO's; DO's; RAH's; etc.
Watershed Specialist; Natural
Resource Specialist; etc.

USAGE: As input to URA, EAR's, ES's, activity plans, and project design.

ACCESS LIMITATIONS: None

RESPONSE TIMES: DESIRED: 1 to 3 hours REQUIRED: 1 day

FREQUENCY OF PRODUCTION: Monthly for RAH/DO Specialists to Quarterly for others.

DEPENDENCIES: None

REQUEST PARAMETERS: State, Administrative (100-0004) or State, Geographic (100-0690); District, Administrative (100-0543); Number, Ground-Water Site (145-5149)

Prog. Area: Watershed-Grp.
 Prog. By: J. L. Liscum
 Date: 21 June 78 (Revision)

OUTPUT DESCRIPTION
 Page 1 of 2

OUTPUT TITLE: TABLE OF DESCRIPTIVE SPRING DATA

OUTPUT FORM: Printout/Data Display

OUTPUT DESCRIPTION: A table summarizing information for a spring (see attached).

USER(s): Hydrologist; Geologist;
 Watershed Specialist; Natural
 Resource Specialist; etc.
 LOCATION(s): 20's; 30's; 40's; etc.

MESSAGE: As input to URA, EAR's, ES's, activity plans, and project design.

ACCESS LIMITATIONS: None

RESPONSE TIMES: REQUIRED: 1 to 3 hours
 REQUIRED: 1 day

FREQUENCY OF PRODUCTION: Monthly for RANLON Specialists or quarterly for others.

DEPENDENCIES: None

REQUEST PARAMETERS: State, Administrative (100-0000) or State, Geographic
 (100-0000); District, Administrative (100-0000); Number,
 Ground-Water Site (100-0000)

GO-9

OUTPUT DESCRIPTION

Page 2 of 2

OUTPUT TITLE: TABLE OF DESCRIPTIVE SPRING DATA

SORT ORDER: Identical to sequence of request parameters

ESTIMATED VOLUME: 2 per District

COMPUTATIONS/PROCESSES: None

ACCURACY: NA

SCALE: NA

ANNOTATIONS: NA

LEGEND: NA

REMARKS: None

TABLE OF DESCRIPTIVE SPRING DATA

State:: (0004) (0690)

District: (0543)

Site Number	Owner or Name	Date Measured	Discharge	Method Measured	Permanence	Water Use	Improve-ments	C H E M I C A L S	A N A L Y S E S	Altitude of LSD
		(Disch)	(GPM)					L S		(Feet)
(5149)	(5153)	(5145)	(5316 & 5315)	(5146)	(5110)	(5186)	(5108)	(5157)	(0431)	
04N/25W-18KS1 S	Tuckerman	12/ /43	1.97			U		P		275
04N/25W-18QS2 S	Tuckerman					U		P		225
04N/25W-18QS3 S	Tuckman					U				250
04N/26W-04PS1 S										1,750
04N/26W-13HS2 S	Flynn	10/ /67	.50							675

OUTPUT DESCRIPTION
Page 1 of 2

OUTPUT TITLE: WATER-LEVEL CONTOUR MAP

OUTPUT FORM: Map/Graphic Display

OUTPUT DESCRIPTION: A graphic display of isolines of equal altitude of ground-water surface within a planning area. (See attached.)

ESTIMATED VOLUME: 1 per District
COMPUTATIONS/PROCESSES: Computation required for (1) location and plotting of well sites within a planning or inventory area on map, (2) altitude of
USER(s): Hydrologist; Geologist; LOCATION(s): SO's; DO's; RAH's; etc.
Watershed Specialist; Planners; etc.

USAGE: As input to URA Step 2, EAR's, ES's, activity plans, and project design.

ACCESS LIMITATIONS: None

SCALE: 1:24,000 and 1:125,000
RESPONSE TIMES: DESIRED: 1 to 3 days REQUIRED: 1 week
ANNOTATIONS: (See attached output sample.)

FREQUENCY OF PRODUCTION: Monthly for RAH/DO specialists to quarterly for others.

LEGEND: Standard map symbols to depict isolines, well sites and boundary of ground-water basin (see legend on attached sample)
DEPENDENCIES: None
REMARKS: None

REQUEST PARAMETERS: State, Administrative (100-0004) or State, Geographic (100-0690); District, Administrative (100-0543); Planning Unit (100-1075); Name, Ground-Water Basin (145-5431).

GO-10

OUTPUT DESCRIPTION

Page 2 of 2

OUTPUT TITLE: WATER-LEVEL CONTOUR MAP

SORT ORDER: Identical to sequence of request parameters

ESTIMATED VOLUME: 1 per District

COMPUTATIONS/PROCESSES: Computation required for (1) location and plotting of well sites within a planning or inventory area on map, (2) altitude of water surface at each site on a specified date, and (3) isolines of equal water surface altitude interpolated graphically from well site water surface altitude.

ACCURACY: Within 5%

SCALE: 1:24,000 and 1:125,000

ANNOTATIONS: (See attached output sample.)

LEGEND: Standard map symbols to depict isolines, well sites and boundary of ground-water basin (see legend on attached sample).

REMARKS: None

OUTPUT TITLE: WATER-LEVEL CONTOUR MAP

NOTE: Identical to summary of request parameters

ESTIMATED VOLUME: 1 per district

COMPUTATION PROCESSES: Computation required for (1) location and plotting of well sites within a planning or inventory area on map, (2) elevation of water surface at each site on a specified date, and (3) location of water surface elevation relative to specified graphical form well site water surface elevation.

ACCURACY: Within 2%

SCALE: 1:24,000 and 1:12,000

ANNOTATIONS: (See attached output sample.)

LEGEND: Standard map symbols for digital features, well sites and boundary of ground-water basin (see legend in attached sample).

REMARKS: None

WATER-LEVEL CONTOUR MAP

State (0004) (0690)

Date: (2195)

District (0543)

P. U. (1075)

Name, Ground-Water Basin (5431)

OUTPUT TITLE: TO

OUTPUT FORM: Map/Graphic Display

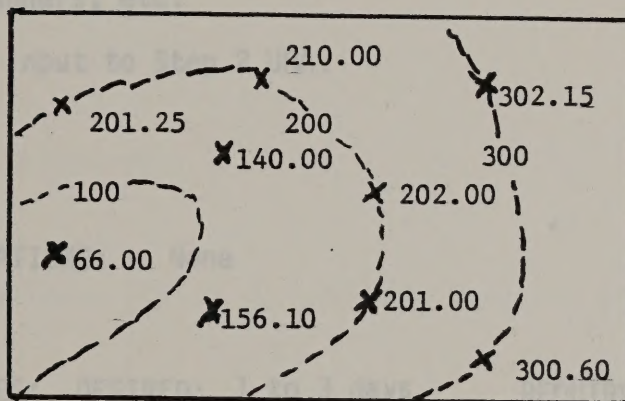
OUTPUT DESCRIPTION: A graphic display of isolines of equal head surface elevation. (See attached.)

USER(s): Geologists

Water-Level Contour Map
1976

ON(s): 50's; 60's; 70's; 80's; 90's.

USAGE: As

--- 100 ---
X

Water-Level Contour

Well Location

Boundary of Ground-Water Basin

FREQUENCY OF PRODUCTION: quarterly for others.

DEPENDENCIES: None

REQUEST PARAMETERS: State, Administrative (100-0004) or State, Geographic (100-0690); District, Administrative (100-0543); Planning Unit (100-1075)

WATER-LEVEL CONTROL MAP

Date: (1952)

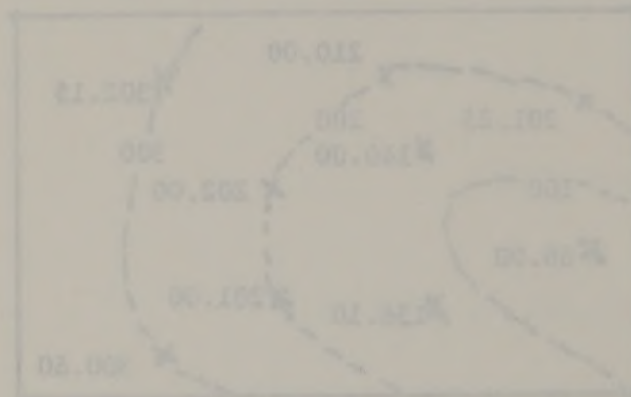
State (1952) (1952)

County (1952)

E. W. (1952)

Name, Ground-Water Basin (1952)

Water-Level Control Map
1952



Water-Level Control
Well Location
Boundary of Ground-Water Basin

OUTPUT DESCRIPTION
Page 1 of 2

OUTPUT TITLE: TOPOGRAPHY OVERLAY

OUTPUT FORM: Map/Graphic Display

OUTPUT DESCRIPTION: A graphic display of isolines of equal land surface elevation. (See attached.)

USER(s): Geologists; Geomorphologist; LOCATION(s): SO's; DO's; RAH's; etc.
Natural Resource Specialist;
Planners; etc.

USAGE: As input to Step 2 URA.

ACCESS LIMITATIONS: None

RESPONSE TIMES: DESIRED: 1 to 3 days REQUIRED: 1 week

FREQUENCY OF PRODUCTION: Monthly for RAH/DO specialists to quarterly for others.

DEPENDENCIES: None

REQUEST PARAMETERS: State, Administrative (100-0004) or State, Geographic (100-0690); District, Administrative (100-0543); Planning Unit (100-1075)

GO-12

OUTPUT DESCRIPTION

Page 2 of 2

OUTPUT TITLE: TOPOGRAPHY OVERLAY

SORT ORDER: Identical to sequence of request parameters

ESTIMATED VOLUME: 3 per District

COMPUTATIONS/PROCESSES: None

ACCURACY: Within 5%

SCALE: Variable (filed at 1:24,000, 1:62,500 or 1:125,000).

ANNOTATIONS: (See attached sample output.)

LEGEND: Standard map symbols for a topographic map.

REMARKS: None

OUTPUT TITLE: TOPOGRAPHY OVERLAY

Sort Order: Identical to sequence of request parameters

ESTIMATED VOLUME: 3 per District

COMPUTATIONS/PROCESSES: None

ACCURACY: Within 5%

SCALE: Variable (Fixed at 1:24,000, 1:48,000 or 1:125,000).

ANNOTATIONS: (See attached sample output.)

LEGEND: Standard map symbols for a topographic map.

REMARKS: None

TOPOGRAPHY OVERLAY

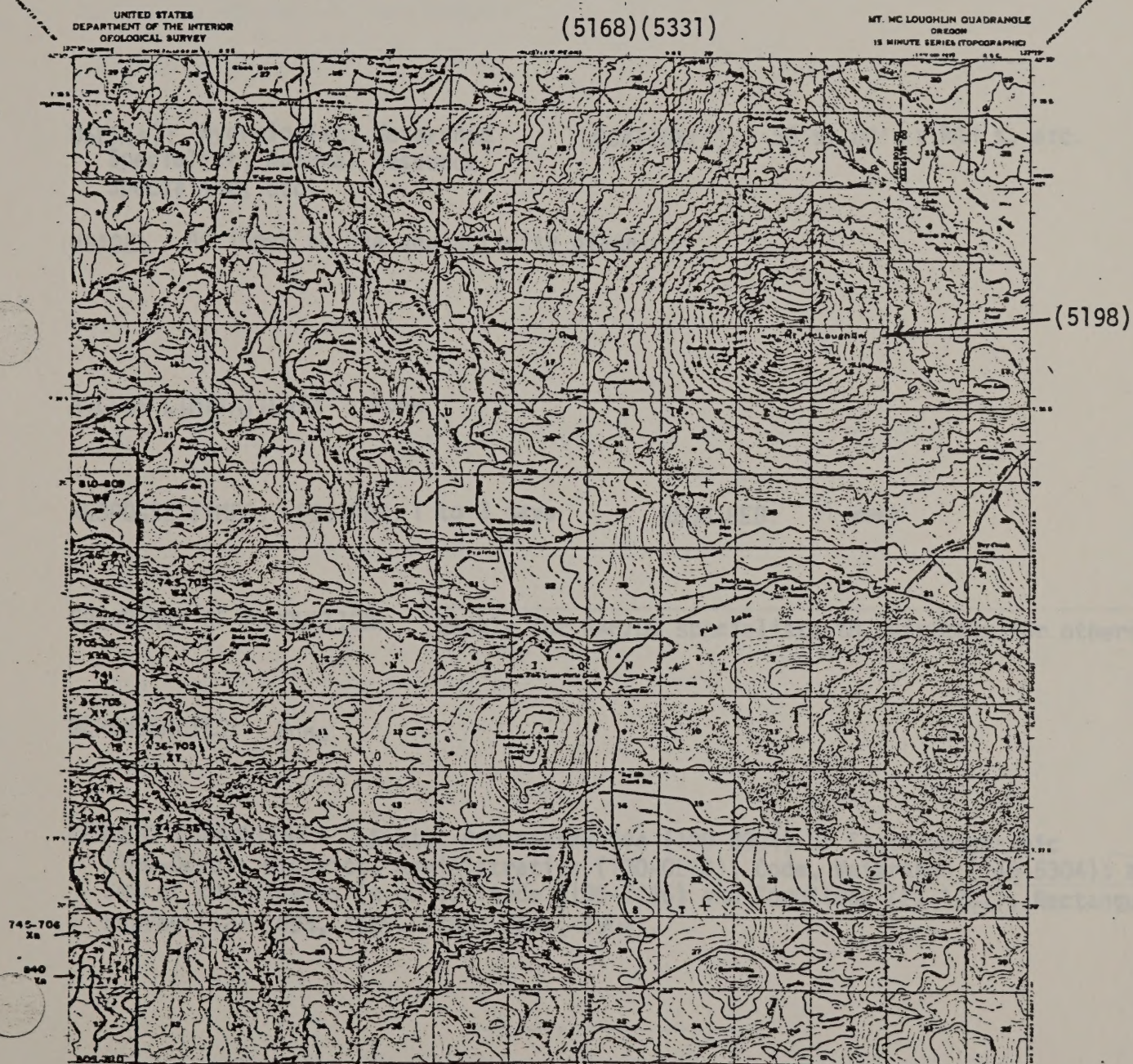
State (0004) (0690)District (0543)P. U. (1075)Date (2302) (2306)

EXHIBIT 101-10

Date 12/25/1964

Page 101-10
Sheet 101-10
F. B. I. 101-10

(TELETYPE)

(601)



Prog. Area: Watershed-Water
Prep. By: G. Lipscomb
Date: 21 June 78 (Revision)

WO-1

OUTPUT DESCRIPTION
Page 1 of 2

OUTPUT TITLE: Water Resources Overlay by Basin

OUTPUT FORM: Map/Graphic Display

OUTPUT DESCRIPTION: A graphic display of water resources information by basin.
(see attached)

USER(s): Hydrologist; Watershed
Specialist; Natural Resource
Specialist; etc.

LOCATION(s): SO's, DO's ; RAH's, etc.

USAGE: As input to URA and activity planning

ACCESS LIMITATIONS: None

RESPONSE TIMES: DESIRED: 1 to 3 days REQUIRED: 1 week

FREQUENCY OF PRODUCTION: Weekly for RAH/DO specialists to quarterly for others

DEPENDENCIES: None

REQUEST PARAMETERS: State, Administrative (100-0004) or State Geographic (100-0690); District, Administrative (100-0543); Code, Watershed (145-5304); a set of coordinates (e.g. latitude (100-1236) and longitude (27-1237); Rectangular Survey (127-1695, 1699, 1703, 2506, 2904).

Project: Watershed-Water
 Prepared By: B. Lippmann
 Date: 27 June 79 (revision)

OUTPUT DESCRIPTION Page 1 of 2

NO-1

OUTPUT TITLE: Water Resource Overview by Basin

OUTPUT FORM: Map/Graphic Display

OUTPUT DESCRIPTION: A graphic display of water resources information by basin.
 (see attached)

REQUEST: Hydrologic, Watershed
 Specialist; Natural Resource
 Specialist; etc.
 LOCATION(s): 30°N, 30°E; 60°W, etc.

USAGE: As input to life and activity planning

ACCESS LIMITATIONS: None

RESPONSE TIMES: DESIRED: 1 to 2 days
REQUIRED: 1 week

FREQUENCY OF PRODUCTION: Weekly for INLAND specialists in quarters for others

DEPENDENCIES: None

REQUEST PARAMETERS: State, Administrative (100-0004) or State Geographic
 (100-0000), District, Administrative (100-0043), Code, Watershed (100-0004), a
 set of coordinates (e.g. latitude (100-1000) and longitude (50-1000)), Recordings
 Survey (100-1000, 1000, 1000, 1000, 1000).

WO-1

OUTPUT DESCRIPTION

Page 2 of 2

OUTPUT TITLE: Water Resources Overlay by Basin

SORT ORDER: Identical to sequence of request parameter

ESTIMATED VOLUME: 2 per District

COMPUTATIONS/PROCESSES: None

ACCURACY: within 5%

SCALE: Variable (filed at 1:24,000, 1:62,500, or 1:125,000)

ANNOTATIONS: (See attached copy of output sample)

LEGEND: Standard map symbols for boundaries of basin/watershed, gauging stations, etc. (see legend on attached sample)

REMARKS: None

OUTPUT TITLE: Water Resources Inventory Data

SORT ORDER: Identical to sequence of request parameter

ESTIMATED VOLUME: 2 per District

COMPUTATIONS/PROCESS: None

ACCURACY: within 2%

SCALE: Variable (ranging at 1:25,000, 1:50,000, or 1:125,000)

ANNOTATIONS: (See attached copy of output sample)

LEGEND: Standard map symbols for boundaries of state/watershed, gauging stations, etc. (See legend on attached sample)

REMARKS: None

WATER RESOURCES OVERLAY BY BASIN

State: (0004) (0690)

Date: (2302)(2306)

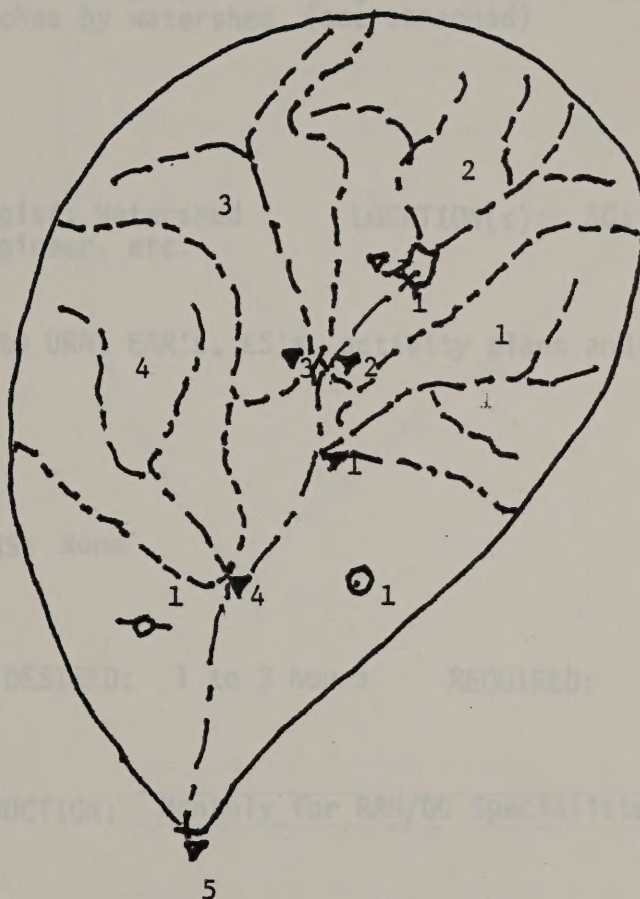
District: (0543)

Basin Name: (5304)
(5416)

OUTPUT TYPE: Map/Graphic Display

OUTPUT FORM: Map/Graphic Display

OUTPUT DESCRIPTION: A graphic display of stream orders, stream cross-sections, and stream reaches by watershed.



Legend

— Basin boundary

--- Watershed boundary

▼1 Stream gaging station number 1 (5303)(5302)

1 Watershed Name (5416)

Reservoir No. 1 (5464)(5463)

▼1 Reservoir gaging station number 1 (5303) (5302)

●1 Well Monitoring station number 1 (5149)



Hyromet station number 1
(5303)(5302)

WATER RESOURCES OVERLAY BY BASIN

Date: (2305) (2305)

Basin Name: (2476)
 District: (0003)
 State: (0004) (0000)



Legend

- Basin boundary
- Sub-basin boundary
- Basin outlet station number 1 (2305) (2305)
- Basin outlet name (2476)
- Basin outlet No. 1 (2476) (2476)
- Basin outlet station number 1 (2305) (2305)
- Basin outlet station number 1 (2476)

Prog. Area: Watershed-Water
Prep. By: G. Lipscomb
Date: 22 June 78 (Revision)

WO-5

OUTPUT DESCRIPTION

Page 1 of 2

OUTPUT TITLE: Channel and Stream Information Overlay

OUTPUT FORM: Map/Graphic Display

OUTPUT DESCRIPTION: A graphic display of stream orders, stream cross-sections, and stream reaches by watershed (see attached)

USER(s): Hydrologist; Watershed Specialist; Engineer, etc.

LOCATION(s): SC; SO's, DO's; RAH's; etc.

USAGE: As input to URA, EAR's, ES's, activity plans and project designs.

ACCESS LIMITATIONS: None

RESPONSE TIMES: DESIRED: 1 to 3 hours REQUIRED: 1 day

FREQUENCY OF PRODUCTION: Monthly for RAH/DO Specialists to quarterly for others

DEPENDENCIES: None

REQUEST PARAMETERS: State, Administrative (100-0004) or State Geographic (100-0690); District, Administrative (100-0543); Code, Watershed (145-5304); a set of coordinates (eg latitude (27-1236) and longitude (27-1237)); Rectangular Survey (127-1695, 1699, 1703, 2506, 2904).

Prog. Area: Watershed-Water
Prog. By: S. Johnson
Date: 22 June 78 (Revised)

OUTPUT DESCRIPTION
Page 1 of 2

NO-2

OUTPUT TITLE: Channel and Stream Information Overlay

OUTPUT FORM: Map/Graphic Display

OUTPUT DESCRIPTION: A graphic display of stream orders, stream cross-sections, and stream reaches by watershed (see attached)

USER(s): Hydrologist; Watershed Specialist; Engineer, etc.
LOCATION(s): SC; SO's; DO's; RWH's; etc.

USAGE: As input to DWA, EIR's, ES's, activity plans and project designs.

ACCESS LIMITATION: None

RESPONSE TIME: DESIRED: 1 to 3 hours
REQUIRED: 1 day

FREQUENCY OF PRODUCTION: Monthly for NARDO Specialists to quarterly for others

DEPENDENCIES: None

REQUEST PARAMETERS: State, Administrative (100-0004) or State Geographic (100-0005); District, Administrative (100-0003); Code, Watershed (145-2304); A set of coordinates (eg latitude (23-123) and longitude (23-123)); Rectangular Survey (123-1005, 1005, 1005, 1005, 1005, 1005).

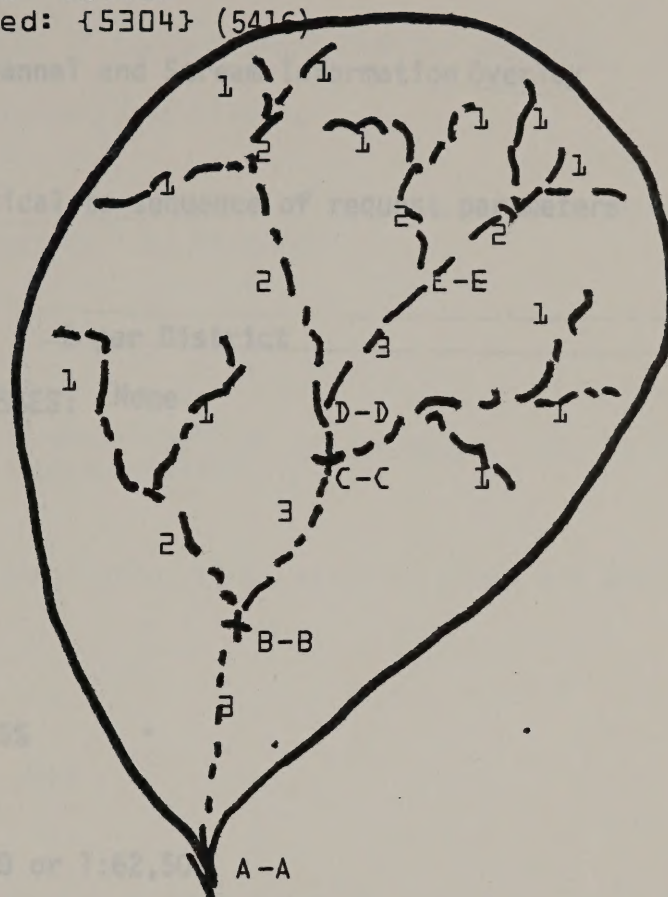
CHANNEL AND STREAM INFORMATION OVERLAY

State: {0004} {0690}

District: {0543}

Watershed: {5304} (5416)

Date: (2302)(2306)

Legend

--1--

Stream of first order

--2--

Stream of second order (5335)

--3--

Stream of third order

A-A

Cross-section of stream at mouth of basin (5347)

A-B

Reach of Stream between A-A and B-B (5351)

—

Basin boundary

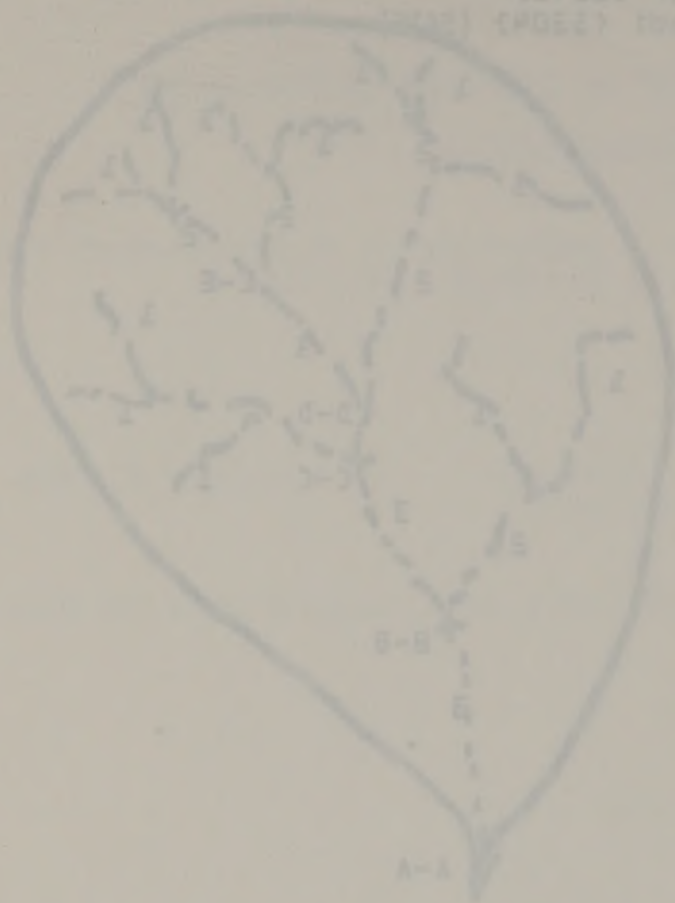


Direction of flow

CHANNEL AND STRAIN INFORMATION OVERLAY

Sheet (2202)(2308)

Scale: 1:50,000
 District: 02543
 Watershed: (2202) (2308)



Legend

- 3--
- 2--
- 1--
- A-A
- B-B
-
-

Stream of first order

Stream of second order (2202)

Stream of third order

Cross-section of stream at mouth of basin (2202)

Reach of stream between A-A and B-B (2202)

Basin boundary

Direction of flow

WO-5

OUTPUT DESCRIPTION
Page 2 of 2

OUTPUT TITLE: Channel and Stream Information Overlay

SORT ORDER: Identical to sequence of request parameters

ESTIMATED VOLUME: 2 per District

COMPUTATIONS/PROCESSES: None

ACCURACY: within 5%

SCALE: 1:24,000 or 1:62,500

ANNOTATIONS: (see attached sample output)

LEGEND: Standard map symbols to depict stream location data (see legend on attached sample)

REMARKS: None

OUTPUT TITLE: Channel and Stream Information Query

SOFT ORDER: Identical to sequence of request parameters

ESTIMATED VOLUME: 2 per District

COMPUTATIONS/PROCESSES: None

ACCURACY: Within 5%

SCALE: 1:24,000 or 1:62,500

ANNOTATIONS: (see attached sample output)

LEGEND: Standard map symbols to depict stream location data (see legend on attached sample)

REMARKS: None

Prog. Area: Watershed-Water
Prep. By: G. Lipscomb
Date: 22 June 78 (Revision)

WD-13

OUTPUT DESCRIPTION
Page 1 of 2

OUTPUT TITLE: Table of Surface-Water Quality Analyses

OUTPUT FORM: Printout/Data Display

OUTPUT DESCRIPTION: A table summarizing water quality parameter values for a water quality station (see attached)

USER(s): Hydrologist; Water Quality Specialist; Watershed Specialist; Engineer; etc. LOCATION(s): SC; SO's; DO's; RAH's; etc.

USAGE: As input to URA, EAR's, ES's, activity plans and project design

ACCESS LIMITATIONS: None

RESPONSE TIMES: DESIRED: 1 to 3 hours REQUIRED: 1 day

FREQUENCY OF PRODUCTION: Monthly for RAH/DO Specialists to quarterly for others

DEPENDENCIES: None

REQUEST PARAMETERS: State, Administrative (100-0004) or State, Geographic (100-0690); District, Administrative (100-0543); Code, Watershed (145-5304) Number, Station type (145-5303)

OUTPUT DESCRIPTION
Page 1 of 2

MS-15

OUTPUT TITLE: Table of Surface Water Quality Analysis
OUTPUT FORM: Printout/Data Display

OUTPUT DESCRIPTION: A table summarizing water quality parameter values for a water quality station (see attached)

USE(s): Hydrologic; Water Quality
Developer: Watershed Specialists
Engineer, etc.

USAGE: An input to WQ, CAR, ES, activity plans and project design

ACCESS LOCATION: None

RESPONSE TIME: DESIRED: 1 to 3 hours
REQUIRED: 1 day

FREQUENCY OF PRODUCTION: Monthly for PARADO locations in quarterly for others

DEPENDENCIES: None

REQUEST PARAMETERS: State, Administrative (100-0004) or State, Geographic (100-0003), District, Administrative (100-0004), Code, Watershed (145-5304)
Number, Station type (145-5303)

WQ-13

OUTPUT DESCRIPTION

Page 2 of 2

OUTPUT TITLE: Table of Surface-Water Quality Analyses

SORT ORDER: Identical to sequence of request parameters

ESTIMATED VOLUME: 12 per district

COMPUTATIONS/PROCESSES: Selection and display of extremes for various water quality parameters together with other gauging station site information (see attached sample output)

ACCURACY: N/A

SCALE: N/A

ANNOTATIONS: N/A

LEGEND: N/A

REMARKS: None

OUTPUT TITLE: Table of Surface-Water Quality Analysis

SOFT ORDER: Identical to sequence of request parameters

ESTIMATED WORK: 15 per district

COMPUTATION/PROCESS: Selection and display of extremes for various water quality parameters together with other gauging station site information (see attached sample output)

ACCURACY: N/A

SCALE: N/A

ANNOTATIONS: N/A

LEGEND: N/A

REMARKS: None

TABLE OF SURFACE-WATER QUALITY ANALYSES

State.--(0004)(0690) Sun River Basin (5304)(5416)

District.--(0543) (5303) 06088300 Muddy Creek near Vaughn, MT (5302)

Location.--Lat 47°37'30", long 111°38'05", in NW-1/4 NE-1/4 sec. 32, T. 22 N., R. 1 E., Cascade County, at gaging station at bridge on county road and 6.2 mi (10.0 km) northwest of Vaughn. (1236)(1237)(1703)(1695)(1699)(2506)(2904)

Drainage Area.--282 mi² (730 km²). (5321)

Period of Record.--Chemical Analyses: July 1968 to September 1975.

Water Temperatures: July 1968 to September 1975.

Sediment Records: July 1968 to September 1975.

Extremes.--1974-75:

Specific Conductance: Maximum daily, 1,890 micromhos Apr. 18; minimum daily, 557 micromhos Aug. 10.

Water Temperatures: Maximum 27.5°C July 6; minimum, freezing point on many days during November to March.

Sediment Concentrations: Maximum daily, 9,870 mg/l Apr. 27; minimum daily, 21 mg/l Oct. 26, 27.

Sediment Discharge: Maximum daily, 48,000 tons (43,500 tonnes) May 7; minimum daily, 2.4 tons (2.2 tonnes) Feb. 6.

Period of Record:

Specific Conductance: Maximum daily, 4,130 micromhos May 11, 1970; minimum daily, 365 micromhos Feb. 20, 1969.

Water Temperatures: Maximum, 27.5°C July 6, 1975; minimum, freezing point on many days during winter periods.

Sediment Concentrations: Maximum daily, 9,870 mg/l Apr. 27, 1975;

minimum daily observed, 11 mg/l Oct. 19, 1968, Oct. 19, 1972, Oct. 30, 1973.

Sediment Discharge: Maximum daily, 48,000 tons (43,500 tonnes) May 7, 1975; minimum daily, 0.84 ton (0.76 tonne) Jan. 8, 1973.

Remarks.--Flow affected by ice during most of winter months. Natural flow increased by wastage from Greenfields Irrigation Project.

Date	Time	Instantaneous Discharge (CFS)	Temperature (Deg C)	Dis-solved Silica (SiO ₂) (MG/L)	Dis-solved Iron (FE) (UG/L)	Dis-solved Manganese (MN) (UG/L)	Dis-solved Calcium (CA) (MG/L)	Dis-solved Magnesium (MG/L)	Dis-solved Sodium (NA) (MG/L)	Dis-solved Potassium (K) (MG/L)	Bicarbonate (HCO ₃) (MG/L)	Dis-solved Sulfate (SO ₄) (MG/L)
Oct. 03...	1230	99	9.0	5.7	40	10	53	58	49	2.3	351	160
Nov. 07...	0930	56	3.5	5.4	10	0	59	58	60	2.5	372	200
Dec. 05...	1015	45	1.0	7.3	10	10	52	66	64	1.8	376	200
Jan. 08...	0900	31	.5	9.7	10	20	64	71	65	2.2	404	240
Feb. 20...	1000	27	.0	8.8	10	0	61	63	68	2.1	387	230
Mar. 18...	0930	34	.0	7.6	20	20	69	83	83	3.3	349	340
Apr. 24...	1000	123	3.0	6.3	10	50	64	74	120	4.7	241	480
May 14...	1130	165	10.5	7.4	20	30	73	71	100	3.5	365	350
June 12...	1030	206	12.5	4.2	30	0	47	36	34	1.7	244	130
July 16...	2030	267	21.0	7.3	0	0	49	37	35	2.3	247	120
Aug. 13...	1400	400	18.5	6.3	0	10	49	38	30	1.6	279	88
Sep. 17...	1325	155	11.0	5.1	20	0	52	53	49	1.8	324	180

(5315)
(5316)

(5150)(6926)

MS-75

Date	Dis- solved Chlo- ride (CL) (MG/L)	Dis- solved Fluo- ride (F) (MG/L)	Dis- solved Nitrite Plus Nitrate (N) (MG/L)	Dis- solved Ortho. Phos- phorus (P) (MG/L)	Dis- solved Phos- phorus (P) (MG/L)	Dis- solved Solids (Sum of Consti- tuents) (MG/L)	Dis- solved Solids (Tons Per Ac-Ft)	Dis- solved Solids (Tons Per Day)	Hard- ness (CA, MG) (MG/L)	Non- Car- bonate Hard- ness (MG/L)	Sodium Ad- sorp- tion Ratio	Spe- cific Con- duct- ance (Micro- mhos)
Oct. 03...	4.0	.9	1.3	.01	.02	512	.70	137	370	83	1.1	835
Nov. 07...	5.5	1.0	1.7	.01	.00	591	.80	89.4	390	66	1.3	956
Dec. 05...	5.1	1.0	1.9	.00	.00	591	.80	71.8	400	93	1.4	954
Jan. 08...	5.9	1.1	2.1	.01	.00	667	.91	55.8	450	120	1.3	1020
Feb. 20...	6.1	1.1	2.2	.01	.00	641	.87	46.7	410	94	1.5	999
Mar. 18...	10	1.0	2.3	.03	.02	779	1.06	71.5	510	230	1.6	1140
Apr. 24...	13	.7	3.5	.04	.05	897	1.22	298	460	270	2.4	1240
May 14...	13	.9	4.2	.03	.02	817	1.11	364	470	180	2.0	1290
June 12...	3.8	.4	.94	.02	.01	382	.52	212	270	65	.9	619
July 16...	4.7	.5	1.5	.03	.04	384	.52	277	270	72	.9	638
Aug. 13...	3.3	.6	1.2	.01	.02	360	.49	389	280	50	.8	605
Sep. 17...	6.0	.7	2.1	.00	.02	517	.70	216	350	82	1.1	811

Prog. Area: Watershed-Water
Prep. By: G. Linscomb
Date: 22 June 78 (Revision)

WD-15

OUTPUT DESCRIPTION
Page 1 of 2

OUTPUT TITLE: Table of Water Quality Analyses for Ground Water

OUTPUT FORM: Printout/Data Display

OUTPUT DESCRIPTION: A table summarizing water quality data for a ground-water site (see attached)

USER(s): Hydrologist; Geologist;
Watershed Specialist; Water
Quality Specialist; etc.

LOCATION(s): SO's; DO's; RAH's; etc.

USAGE: As input to URA, EAR's, ES's, activity plans, and project designs

ACCESS LIMITATIONS: None

RESPONSE TIMES: DESIRED: 1 to 3 hours REQUIRED: 1 day

FREQUENCY OF PRODUCTION: Monthly for RAH/DO Specialists to quarterly for others

DEPENDENCIES: None

REQUEST PARAMETERS: State, Administrative (100-0004) or State, Geographic (100-0690); District, Administrative (100-0543); Number, Ground-water Site (145-5149)

OUTPUT DESCRIPTION
Page 1 of 2

WD-12

OUTPUT TITLE: Table of water quality analysis for ground water

OUTPUT FORM: Spreadsheet display

OUTPUT DESCRIPTION: A table summarizing water quality data for a ground-water site (see attached)

USERS: Hydrologist; Geologist; Water Quality Specialist; Water Quality Specialist

LOCATION(s): 30' x 30' x 30' K&L; etc.

USAGE: As input to USA, E&S, activity plans, and project designs

ACCESS LIMITATIONS: None

RESPONSE TIMES: DESIRED: 1 to 3 hours; REQUIRED: 1 day

FREQUENCY OF EXECUTION: Monthly for existing specialists to quarterly for others

DEPENDENCIES: None

REQUEST PARAMETERS: State, Administrative (100-0000) or State, Geographic (100-0000); District, Administrative (100-0000); Number, Ground-water Site (100-0000)

WB-15

OUTPUT DESCRIPTION
Page 2 of 2

OUTPUT TITLE: Table of Water Quality Analyses for Ground Water

SORT ORDER: Identical to sequence of request parameter plus Parameter, Water Resource (145-5316)

ESTIMATED VOLUME: 6 per district

COMPUTATIONS/PROCESSES: None

ACCURACY: N/A

SCALE: N/A

ANNOTATIONS: N/A

LEGEND: N/A

REMARKS: None

OUTPUT TITLE: Table of Water Quality Analysis for Ground Water

NOTE: Identical to sequence of request parameter plus Parameter, Water
Resource (145-8310)

ESTIMATED VOLUME: 6 per district

COMPUTATIONS/PROCESS: None

ACCURACY: N/A

SCALE: N/A

ANNOTATIONS: N/A

LEGEND: N/A

REMARKS: None

(0004) (0690) STATE
(0543) DISTRICT
(5149) SITE NUMBER

TABLE OF WATER QUALITY ANALYSES FOR GROUND WATER

DATE of SAMPLE (5150)	DIS SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (NO3) (MG/L)	DIS SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	PERCENT SODIUM	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG. C)
					(5315)	(5316)						
64-07-00	210	65	.1	M.00	--	716	310	110	--	1000	8.2	--
64-07-00	--	9.0	.1	M.00	--	--	56	0	--	286	8.2	--
72-09-22	46	19	.4	1.4	280	--	100	10	49	---	8.0	--
64-03-31	20	23	.4	10	262	235	130	0	40	416	7.8	--
60-10-14	8.0	4.0	.8	3.0	--	145	68	0	41	272	7.9	--
60-10-30	11	2.0	.7	.00	--	166	74	0	--	252	8.3	--
.	17	5.0	.5	.00	--	167	80	0	45	269	8.3	--
.	22	5.0	.7	.00	--	182	64	0	55	266	8.4	--
.	20	11	1.0	2.0	--	196	32	0	80	300	8.6	--
.	27	4.0	.6	.00	--	186	58	0	61	284	8.2	--
.	23	7.0	.5	4.0	--	181	10	0	58	244	8.2	--
.	25	4.0	.5	3.0	--	195	60	0	60	284	8.0	--
.	26	4.0	.8	4.0	--	198	56	0	69	309	8.2	--
.	22	6.0	.8	3.0	--	203	60	0	60	284	8.3	--
.	18	4.0	.7	6.0	--	190	58	0	61	256	7.8	--
.	20	7.0	.6	5.0	--	186	58	0	61	295	7.5	--
.	16	4.0	.8	4.0	--	176	56	0	60	292	8.1	--
.	11	8.0	.3	.00	--	148	80	0	--	269	8.2	--
.	16	5.0	.5	.00	--	175	66	0	--	269	8.3	--
.	23	4.0	.6	2.0	--	189	74	0	--	277	8.3	--
.	27	6.0	.5	.00	--	189	56	0	--	277	8.1	--
.	27	7.0	.5	3.0	--	186	78	0	--	292	8.2	--
.	21	5.0	.7	4.0	--	201	58	0	--	284	8.5	--
.	20	4.0	.6	5.0	--	174	60	0	--	262	8.3	--
.	18	8.0	.8	5.0	--	189	64	0	--	262	8.1	--
53-11-25	9.0	4.0	.1	.00	--	157	76	0	44	259	8.2	--
.	7.0	4.0	1.6	4.0	--	151	18	0	--	287	8.0	--
.	8.0	2.0	1.6	3.0	--	149	14	0	--	282	8.0	--
.	10	4.0	1.2	2.0	--	173	16	0	--	284	8.1	--
64-06-10	19	5.0	1.0	.00	--	181	4	0	--	265	6.2	--

WS-78

WO-15

Prog. Area: Watershed-Water
Prep. By: G. Linscomb
Date: 22 June 78 (Revision)

WD-35

OUTPUT DESCRIPTION
Page 1 of 2

OUTPUT TITLE: Table of Water Developments by Resource Activity

OUTPUT FORM: Printout/Data Display

OUTPUT DESCRIPTION: A table summarizing water development projects for a planning area (see attached)

USER(s): Watershed Specialist; LOCATION(s): SO's; DO's; RAH's; etc.
Natural Resource Specialist; Planners, etc

USAGE: As input to Step 2 of URA

ACCESS LIMITATIONS: None

RESPONSE TIMES: DESIRED: 1 to 3 days REQUIRED: 1 week

FREQUENCY OF PRODUCTION: Quarterly for RAH/DO Specialists to annually for others

DEPENDENCIES: None

REQUEST PARAMETERS: State, Administrative (100-0004) or State Geographic (100-0690); District, Administrative (100-0543); Planning Unit (100-1075);
Type of Project (145-5463)

Prog. Area: Watershed-Water
Prep. By: E. Thompson
Date: 25 June 78 (Revision)

OUTPUT DESCRIPTION
Page 1 of 2

WS-25

OUTPUT TITLE: Table of water development by Resource Activity
OUTPUT FORM: Printout/Data Display

OUTPUT DESCRIPTION: A table summarizing water development projects for a planning area (see attached)

USER(s): Watershed Specialist;
NATURAL RESOURCE SPECIALIST; Planner, etc.
LOCATION(s): 50°E; 00°E; 50°E; etc.

NOTE: As input to Step 2 of WSA

ACCESS LIMITATION: None

RESPONSE TIME: DESIRED: 1 to 3 days
REQUIRED: 1 week

FREQUENCY OF PRODUCTION: Quarterly for RAN/DO Specialists to annually for others

DEPENDENCIES: None

REQUEST PARAMETERS: State, Administrative (100-0000) or State Geographic (100-0000); District, Administrative (100-0000); Planning Unit (100-1075);
Type of Project (100-1000)

WD-35

OUTPUT DESCRIPTION
Page 2 of 2

OUTPUT TITLE: Table of Water Developments by Resource Activity

SORT ORDER: Identical to sequence of request parameter

ESTIMATED VOLUME: 6 per District

COMPUTATIONS/PROCESSES: None

ACCURACY: N/A

SCALE: N/A

ANNOTATIONS: N/A

LEGEND: N/A

REMARKS: Input for this output may be provided by JDR System (0005)

OUTPUT TITLE: Table of Water Development by Resource Activity

SHEET ORDER: Identical to sequence of request parameters

ESTIMATED VOLUME: 5 per District

COMPUTATIONS/PROCESSES: None

ACCURACY: N/A

SCALE: N/A

ANNOTATIONS: N/A

LEGEND: N/A

REMARKS: Input for this output may be provided by the System (0005)

W0-35

TABLE OF WATER DEVELOPMENTS BY RESOURCE ACTIVITY

State (0004) (0690)

District (0543)

(2302)(2306)

P.U. Little Hills (1075)

Date 8/17/74

[illegible]

Prog. Area: Watershed-Water
Prep. By: G. Lipscomb
Date: 22 June 78 (Revision)

WO-36

OUTPUT DESCRIPTION
Page 1 of 2

OUTPUT TITLE: Water Quality and Yield Overlay by Planning Unit

OUTPUT FORM: Map/Graphic Display

OUTPUT DESCRIPTION: A graphic display depicting the location of water quality monitoring stations, water quality problem areas, water yield areas, etc.
(see attached)

USER(s): Hydrologist; Watershed Specialist; Water Quality Specialist, etc. LOCATION(s): SO's; DO's; RAH's, etc

USAGE: As input to Step 3 for URA

ACCESS LIMITATIONS: None

RESPONSE TIMES: DESIRED: 1 to 3 days REQUIRED: 1 week

FREQUENCY OF PRODUCTION: Quarterly for RAH/DO Specialists to annually for others

DEPENDENCIES: None

REQUEST PARAMETERS: State, Administrative (100-0004) or State, Geographic (100-0690); District, Administrative (100-0543); Planning Unit (100-1075)

WS-82

WO-36

OUTPUT DESCRIPTION

Page 2 of 2

OUTPUT TITLE: Water Quality and Yield Overlay by Planning Unit

SORT ORDER: Identical to sequence of request parameter

ESTIMATED VOLUME: 1 per District

COMPUTATIONS/PROCESSES: (see attached sample)

ACCURACY: Within 5%

SCALE: Variable (filed at 1:24,000, 1:62,500 or 1:125,000)

ANNOTATIONS: (see attached sample)

LEGEND: Standard map symbols to depict boundaries of water quality/yield areas and station locations (see legend on sample)

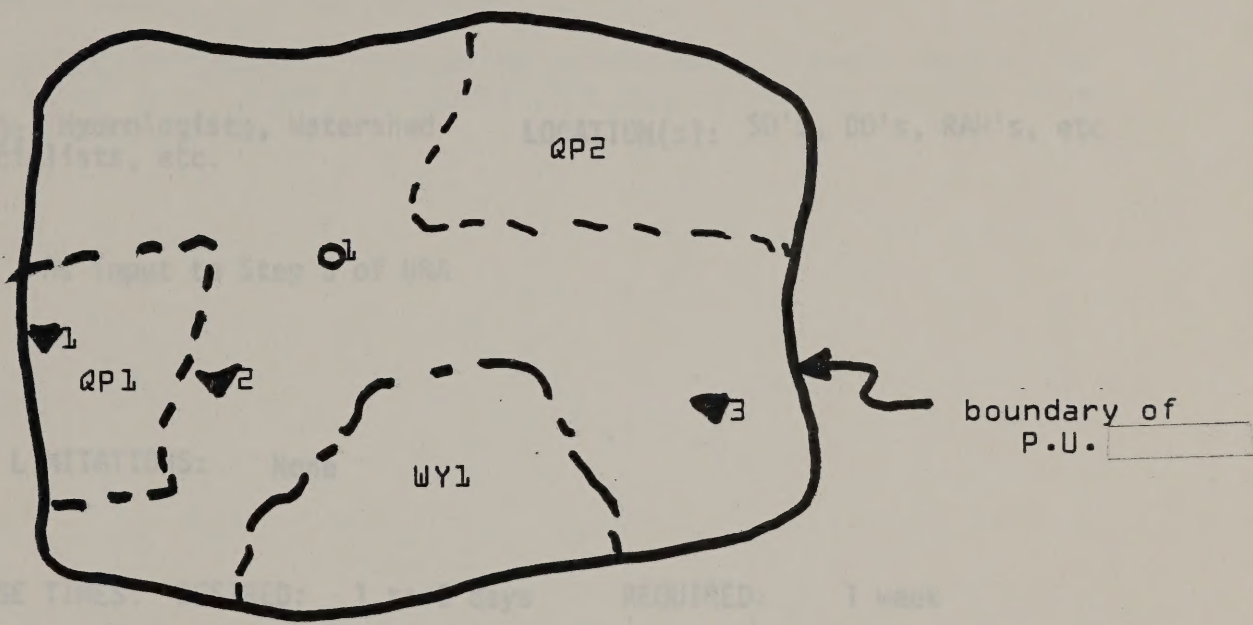
REMARKS: None

WS-83

WATER QUALITY & YIELD OVERLAY BY PLANNING UNIT

State: {0004} {0690} Date: (2302)(2306)
 District: {0543}
 P.U.: {1075}

OUTPUT DESCRIPTION: A table summarizing mean annual runoff and mean annual water yield for significant water yield areas within a planning area (see attached)



Legend

- ▼ 1 Water quality monitoring station No. 1 {Stream} (5303)(5302)
- 1 Water quality monitoring station No. 1 {Well}
- QP1 Water quality problem area {sediment from area with poor ground cover}
- QP2 Water quality problem area {sediment from area with poor ground cover}
- WY1 Significant water yield area {municipal water supply}

Prog. Area: Watershed-Water
Prep. By: G. Lipscomb
Date: 22 June 78 (Revision)

WD-37

OUTPUT DESCRIPTION
Page 1 of 2

OUTPUT TITLE: Table of Significant Water Yield Areas

OUTPUT FORM: Printout/Data Display

OUTPUT DESCRIPTION: A table summarizing mean annual runoff and mean annual water yield for significant water yield areas within a planning area (see attached)

USER(s): Hydrologist;, Watershed Specialists, etc.

LOCATION(s): SO's, DO's, RAH's, etc

USAGE: As input to Step 3 of URA

ACCESS LIMITATIONS: None

RESPONSE TIMES: DESIRED: 1 to 3 days REQUIRED: 1 week

FREQUENCY OF PRODUCTION: Quarterly for RAH/DO Specialists to annually for others

DEPENDENCIES: None

REQUEST PARAMETERS: State, Administrative (100-0004) or State, Geographic (100-0690); District, Administrative (100-0543); Planning Unit (100-1075) Code, Watershed (145-5304)

WS-85

WQ-37

OUTPUT DESCRIPTION
Page 2 of 2

OUTPUT TITLE: Table of Significant Water Yield Areas

SORT ORDER: Identical to sequence of request parameter

ESTIMATED VOLUME: 1 per District

COMPUTATIONS/PROCESSES: Computation of mean annual runoff (inches) and mean annual water yield (acre feet) from gauging station recorded values for a planning area

ACCURACY: N/A

SCALE: N/A

ANNOTATIONS: N/A

LEGEND: N/A

REMARKS: None

TABLE OF SIGNIFICANT WATER YIELD AREAS

State: (0004) (0690)

Date: (2302)(2306)

District: (0543)

Planning Unit : (1075)

WS-87

Watershed Name	Map Key	Acres		Mean Annual Runoff (inches)	Mean Annual Water Yield (acre feet)
		BLM	Other		
(1) (5416)	(2) (5304)	(3) (6594)	(4) (6597)	(5) (5417)	(6) (5419)

WD-37

(5) Runoff=mean annual inches of estimated runoff

(6) Yield= (Column 3 + Column 4) X Column 5 ÷ 12

Prog. Area: Watershed-Water
Prep. By: G. Lipscomb
Date: 22 June 78 (Revision)

WD-38

OUTPUT DESCRIPTION
Page 1 of 2

OUTPUT TITLE: Flood and Sediment Damage Overlay

OUTPUT FORM: Map/Graphic Display

OUTPUT DESCRIPTION: A graphic display of the boundaries of flood/sediment damage areas and source areas within a planning area. (see attached)

USER(s): Hydrologists: Watershed Specialists; Water Quality Specialists Etc. LOCATION(s): SO's; DO's; RAH's, etc.

USAGE: As input to Step 3 of URA

ACCESS LIMITATIONS: None

RESPONSE TIMES: DESIRED: 1 to 3 days REQUIRED: 1 week

FREQUENCY OF PRODUCTION: Quarterly for RAH/DO Specialists to annually for others

DEPENDENCIES: None

REQUEST PARAMETERS: State, Administrative (100-0004) or State, Geographic (100-0690); District, Administrative (100-0543); Planning Unit (100-1075)

WD-38

OUTPUT DESCRIPTION

Page 2 of 2

OUTPUT TITLE: Flood and Sediment Damage Overlay

SORT ORDER: Identical to sequence of request parameter

ESTIMATED VOLUME: 1 per District

COMPUTATIONS/PROCESSES: See attached sample

ACCURACY: Within 5%

SCALE: Variable (filed at 1:24,000, 1:62,500 or 1:125,000)

ANNOTATIONS: See attached sample

LEGEND: Standard map symbols for depicting damage and source areas on a map for planning area (see legend on sample)

REMARKS: None

WS-89

FLOOD & SEDIMENT DAMAGE OVERLAY

State: {0004} {0690}
District: {0543}
P.U. {1075}

Date: (2302)(2306)

OUTPUT TITLE: Flood & Sediment Damage Table

OUTPUT FORM: Printout/Data Display

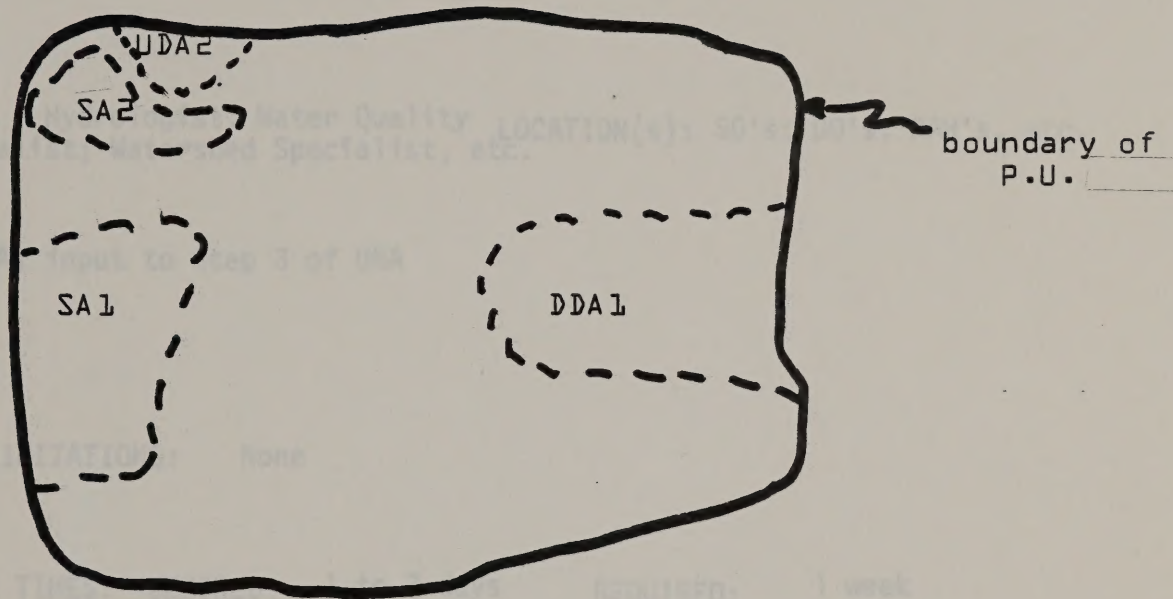
OUTPUT DESCRIPTION: A table summarizing size, type of damage, and annual damages for damage areas within a planning area (see attached)

USER(s): Water Quality Specialist, etc.

USAGE: Input to Map 3 of USA

ACCESS LIMITATION: None

RESPONSE TIME: 1 week



DDA1
UDA2
SA1
SA2

(5471)

Damage area No. 1, developed

Damage area No. 1, undeveloped

Source area for DDA1

Source area for UDA2

REQUEST PARAMETERS: State, Administrative (100-0004) or State Geographic (100-0690); District, Administrative (100-0543); Planning Area (100-1075); Number, Flood and Sediment Damage Areas (145-5471)

Prog. Area: Watershed-Water
Prep. By: G. Lipscomb
Date: 22 June 78 (Revision)

WD-39

OUTPUT DESCRIPTION
Page 1 of 2

OUTPUT TITLE: Flood and Sediment Damage Table

OUTPUT FORM: Printout/Data Display

OUTPUT DESCRIPTION: A table summarizing size, type of damage and annual damages for damage area within a planning area (see attached)

USER(s): Hydrologist: Water Quality Specialist; Watershed Specialist, etc. LOCATION(s): SO's; DO's; RAH's, etc.

USAGE: As input to Step 3 of URA

ACCESS LIMITATIONS: None

RESPONSE TIMES: DESIRED: 1 to 3 days REQUIRED: 1 week

FREQUENCY OF PRODUCTION: Quarterly for RAH/NO Specialists to annually for others

DEPENDENCIES: None

REQUEST PARAMETERS: State, Administrative (100-0004) or State Geographic (100-0690); District, Administrative (100-0543); Planning Area (100-1075); Number, Flood and Sediment Damage Area (145-5471)

WO-39

OUTPUT DESCRIPTION
Page 2 of 2

OUTPUT TITLE: Flood and Sediment Damage Table

SORT ORDER: Identical to sequence of request parameter

ESTIMATED VOLUME: 1 per District

COMPUTATIONS/PROCESSES: None

ACCURACY: N/A

SCALE: N/A

ANNOTATIONS: N/A

LEGEND: N/A

REMARKS: None

FLOOD AND SEDIMENT DAMAGE TABLE

State: (0004) (0690)

Date: (2302)(2306)

District: (0543)

Planning Unit: (1075)

Damage Area	Acres	Type of Damage	Estimated Annual Damage (dollars)
(1) (5471)	(2) (5472)	(3) (5473)	(4) (5474)

- (1) Number on overlay for damage area
- (2) Acres in damage area
- (3) Code for type of damage (present or future)
- (4) Estimated average annual dollar damage (present only)

MS-93

W0-39

WO-45

HIGH PRIORITY

Prog. Area: Watershed - Water

Prep. By: G. Lipscomb

Date: 22 June 78 (Revision)

OUTPUT DESCRIPTION

Page 1 of 2

OUTPUT TITLE: Table of Water Resource Inventory Progress

OUTPUT FORM: Printout/Data Display

OUTPUT DESCRIPTION: A table summarizing by watershed the acreage inventoried and that remaining to be completed (See Attached).

USER(s): Hydrologist; Watershed
Specialist; Planner; Manager

LOCATION(s): W.O.; S.C.; SO;s; DO's

USAGE: As input to reports, AWP progress, programing, and other planning activities for Watershed.

ACCESS LIMITATIONS: None

RESPONSE TIMES: DESIRED: 3 days

REQUIRED: 1 week

FREQUENCY OF PRODUCTION: Annually at D.O.

DEPENDENCIES:
None

REQUEST PARAMETERS:

State, Administrative (100-0004) or State, Geographic
(100-0690); District, Administrative (100-0543); Code, Watershed (145-5304)

OUTPUT DESCRIPTION

Page 2 of 2

WO-45

OUTPUT TITLE: Table of Water Resource Inventory Progress

SORT ORDER: Identical to sequence of request parameters

ESTIMATED VOLUME: 2 per District

COMPUTATIONS/PROCESSES: None

ACCURACY: NA

SCALE: NA

ANNOTATIONS: NA

LEGEND: NA

REMARKS: Summary may be required for Bureauwide progress (for Washington Office)

TABLE OF WATER RESOURCE INVENTORY PROGRESS

State: (0004)(0690)

District: (0543)

Date: (2195)

State	Watershed Number/Name	Acres Inventoried	Acres Backlog
(0690)	(5304)(5416)	(Computed DE)	(Computed DE)
	TOTALS		

SI-1
C. Inputs

TITLE/DESC: This section contains a description and a sample for each high priority
FORM: CO input required for the Watershed Information System. It includes inputs
DESCRIPTION: required to produce Watershed outputs plus other resource program outputs
soil data which rely on Watershed data input.

PREPARATION RESPONSIBILITY: BLM District Office, Resource Area Headquarters Office,
or State Office
FORMAT: While initial data base generation forms have been included for several
data sources (SI-17, SI-18, AI-9, AI-10, WI-24, and WI-25), such sources
may be accessed through linkage with the Bureau's computer rather than
DATA ENTRY: transfer of their data into BLM's data base.

FREQUENCY OF UPDATE: May not be recurring--if updated, will not be more
frequently than each 20-year period.

VOLUME OF UPDATE: To be determined

ARCHIVING REQUIREMENTS: Most likely will not be updated--if so, move old data to
history file regardless of age and record new data.

ACCESS LIMITATIONS: Only Soil Scientists--Locations to be determined later.

SPECIAL EDIT/AUDIT/VALIDATION REQUIREMENTS: To be developed

REMARKS: May be replaced by soils data form developed for Soil-Vegetation
Inventory Method (see SI-9). Must be integrated with inputs
SI-4, SI-5, SI-6, SI-8, and SI-12.

Prog. Area: Watershed-Soils
Prep. By: G. Lipscomb
Date: 22 June 78
(Revision)

SI-1

DATA SOURCE DESCRIPTION
(DATA BASE MAINTENANCE)

TITLE/DESIGNATION: Soil Description Form, BLM Form 7310-9

FORM: Coded Data form

DESCRIPTION: A field form on which soil taxonomic unit data is recorded for each soil identified within an inventory area.

PREPARATION RESPONSIBILITY: BLM District Office, Resource Area Headquarters Office, or State Office Soil Scientist

FORMAT: (see attached sample input)

DATA ENTRY PROCEDURE: To be determined

FREQUENCY OF UPDATE: May not be recurring-- if updated, will not be more frequently than each 20-year period.

VOLUME OF UPDATE: To be determined

ARCHIVING REQUIREMENTS: Most likely will not be updated--if so, move old data to history file regardless of age and record new data.

ACCESS LIMITATIONS: Only Soil Scientists--locations to be determined later.

SPECIAL EDIT/AUDIT/VALIDATION REQUIREMENTS: To be developed

REMARKS: May be replaced by soils data form developed for Soil-Vegetation Inventory Method (see SI-9). Must be integrated with inputs SI-4, SI-5, SI-6, SI-9, and SI-12.

Soil Inventory Area (4600)

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SOIL DESCRIPTION FORM

1. State (0004) <u>78090</u>	2. District (0544)	3. Planning Unit (0012)	4. Soil Unit <u>Soil Unit</u> (4683) <u>LEID-Act c1, 4112---</u>	5. Soil Map Sym- bol (4600) <u>400</u>	6. Surname <u>INDIGER</u> (4561)	7. Date (6630) <u>2 mo 70 yr</u>					
8. Area (0418) <u>21</u>	9. County (0546)	10. Location Sec. <u>12</u> , T. <u>24</u> , R. <u>1S</u>	11. Photo No. <u>CHY19313</u> (5713)	14. Parent Rock <u>Loess</u> (4643)							
15. Formation Name <u>Carey Kipuka</u> (5104)		16. Surface Conditions (percent) <u>4655</u> Stone -- Rock -- (4654)		17. Soil Conditions <u>Alkaline</u> (4567) Saline <u>HIGH</u> Water table Depth (4548)		18. Landform <u>Hilly & Rolling</u> (5132)					
19. Slope (percent) (3874) <u>-3</u>		20. Aspect (6523) <u>-S</u>	21. Elevation (0431) <u>-5245</u>	22. Present Erosion (4712) <u>6067</u> Type <u>Mass Movement</u> (4519) <u>SSF - 50 Class 2</u>		23. Hydrologic Group (4562) <u>C</u>					
24. Precipitation (in) <u>12-14</u> (0694)		25. Temperature (3370) <u>41</u> Air <u>62</u> Soil (4655)		26. Frost-free (4949) <u>Days - 22 > 23°</u>	27. Drainage Class <u>Mod. Well Drained</u> (4514)	28. Infiltration <u>Moderate</u> (4516)					
29. Percolation <u>Moderate</u> (4517)		30. ERD (0755) <u>2.2 in</u>		31. AWC (4533) <u>-2.2 in</u>							
32. HORIZON	33. THICKNESS	34. COLOR DRY (4557) MOIST (4689) MATRIX MOTTLING		35. TEXTURE	36. STRUCTURE	37. CONSISTENCY DRY MOIST	38. CUTANE	39. ROOTS	40. STONES % VOL. (4605)	41. REACTION (pH)	42. BOUNDARY
A11	0-5	10YR 2/2.3D 4/3D		Sil	2f & vfg	So D fr M vh D		3f & vf		6.3	CW
A22	5-15	10YR 3/3M 5/3D		Sil	2m & fsgK	fr M ch D		3m & f		6.4	gs
B2	15-23	10YR 3.7/3M 5/3D		Sil	1 abk	vfi M ch D		2m & f		6.4	aw
B21b	23-34	10YR 4/3M 6/3D		Sic	3m & fcp	vfi M ch D	4n pf	2m & f		7.0	CS
B2ca1b	34-44	10YR 5/3M 6/3D		Sic	3f & mobk	fr M ch D	1m to 4pf	2m & f		7.8	CW
B2ca2b	44-58	10YR 5/3M 6/3D		Sic	3f & mobk	fr M ch D	1n			7.8	gs
B2ca3b	58-68	10YR 5/3M 7/3D		Sic	3f & mobk	fr M ch D		1f & m		8.0	gs
Cca1b	68-79	10YR 6/3M 7/3D		Sil		fr M		1		7.8	
Ccam1b	79-91	10YR 6/3M 8/3D		Sil	Thin lenses of cemented hardpan					8.2	
Ccam2b	91-108	10YR 6/3M 8/3D		Sil	Weakly cemented.					8.0	
Cb	108-118	10YR 5/3M 6/3D		gsyl					30	7.8	
Du	118	Basalt									
(4561)	(4547)			(4526)	(4653)	(4538)	(4555)	(4644)	(4606)	(4642)	(4686)

(Instructions inside back cover)

Form 7310-9 (November 1970)

May also include DEs (4598) and (4666)

66-99

SI-1

Prog. Area: Watershed-Soils

Prep. By: G. Lipscomb

Date: 22 June 78

(Revision)

SI-4

DATA SOURCE DESCRIPTION
(DATA BASE MAINTENANCE)

TITLE/DESIGNATION: Engineering Properties of Soils (Estimated), Revised BLM Form 7310-22.

FORM: Coded data form

DESCRIPTION: A form on which estimated engineering properties of soil taxonomic units are recorded for an inventory area.

PREPARATION RESPONSIBILITY: Soil Scientist at Resource Area Headquarters, District Office or State Office

FORMAT: See attached sample input

DATA ENTRY PROCEDURE: To be determined

FREQUENCY OF UPDATE: May not be recurring--if updated, will not be more frequent than each 20-year period.

VOLUME OF UPDATE: To be determined

ARCHIVING REQUIREMENTS: Most likely will not be updated--if so, move old data to history file regardless of age, and record new data.

ACCESS LIMITATIONS: Only soil scientists--location to be determined later

SPECIAL EDIT/AUDIT/VALIDATION REQUIREMENTS: To be developed

Must be integrated with inputs SI-1, SI-5, SI-6, SI-9, and SI-12.

REMARKS:

WS-100

County: (0546)
 State: (0004) (0690)
 District: (0543)

TABLE Soil Inventory Area: (4600)

ENGINEERING PROPERTIES OF SOILS (Estimated)

CORROSION POTENTIAL OF SOILS (ESTIMATED)													
(4683) Soil Series Symbol	(4648) Soil Name	(4547) Depth From Surface (inches)	(4564) Depth to Bedrock (inches)	(4562) Hydro- logic Group	(4635) Shrink/ Swell Potential	CORROSION POTENTIAL (4540) Uncoated Steel Concrete		CLASSIFICATION			(4605) Coarse Frag- ments >3" (percent)	Liquid Limit (percent)	Plasticity Index
								USDA Texture (4526)	Unified (4523)	AASHO (4522)			
36	Witzel	0-19	(4546) 12-20	D	Low	Moderate	Moderate	Very cobbly silty clay loam 5311	GC or CL	A-6	30-60	35-40	15-20
370	Unnamed	0-60	40+	B	Moderate	Moderate	Moderate	Gravelly clay loam	CL	A-6	0-40	25-35	15-20
371	Unnamed	0- 9	20-40	B	Low	Moderate	Moderate	Loam	ML or CL-ML	A-4 or A-6	0	25-35	5-10
		9-34			Low	High	Moderate	Very gravelly loam	GM	A-2	0-20	25-35	5-10
372	Unnamed	0-18	12-20	D	Low	Moderate	Moderate	Very gravelly loam	GM	A-4 or A-2	0-20	20-30	5-10
380	Pollard	0- 9	40+	C	Low	Moderate	Low	Loam or clay loam	ML or CL	A-6	0-15	35-40	10-15
		9-50			Moderate	High	Moderate	Clay	ML or MH	A-7-5	0	45-55	15-20
381	Unnamed	0-14	20-40	C	Low	Moderate	Low	Gravelly loam or gravelly clay loam	ML or GM	A-4 or A-6	0	25-40	5-15
		14-34			Moderate	High	Moderate	Gravelly clay or gravelly clay loam	CL or ML	A-6, A-7-5	0-20	35-50	15-25
382	Unnamed	0-11	40+	C	Low	Moderate	Low	Gravelly clay loam	GM	A-4 or A-6	0-10	25-40	5-15
		11-74			Moderate	High	Moderate	Very gravelly clay or very gravelly silty clay	GC or CL	A-7-5	0-20	45-55	15-20
701	Unnamed	0- 8	12-20	D	Low	Low	Low	Gravelly loam	SM	A-4, A-2	0-20	20-30	NP- 5
		8-13			Low	Low	Low	Very gravelly loam	GM or CL	A-4 or A-6	0-20	20-30	5-10
704	Carney	0-30	20-40	D	High	High	Low	Clay	CH	A-7-6	0-30	60-75	35-45
705	Unnamed	0- 7	20-40	C	Low	Low	Low	Cobbly clay loam	ML or CL	A-4	0-35	30-35	5-10
		7-31			Moderate	Moderate	Low	Very cobbly clay	CG	A-6, A-7-5	30-60	35-50	15-25
706	Medco	0-13	20-40	D	Moderate	Moderate	Low	Loam or clay loam	ML, SM or GM	A-6 or A-4	0-40	30-40	5-15
		13-27			High	High	Low	Clay	CH	A-7	0-20	60-80	35-50
710	Coker	0-70	40+	D	High	High	Low	Clay	CH	A-7	0- 5	60-75	35-45
712	Jumpoff	0- 5	40+	C	Moderate	Low	Low	Gravelly clay loam	CL-ML, ML	A-4	0	25-35	5-10

MS-101

4-1-4

Prog. Area: Watershed-Soils

Prep. By: G. Lipscomb

Date: 22 June 78

(Revision)

SI-5

DATA SOURCE DESCRIPTION
(DATA BASE MAINTENANCE)

TITLE/DESIGNATION: Forest Management Interpretations, Revised BLM Form 7310-24

FORM: Coded data form

DESCRIPTION: A form on which forest management interpretive data for soil taxonomic units are recorded for an inventory area.

PREPARATION RESPONSIBILITY: Soil Scientists at Resource Area Headquarters, District Office or State Office

FORMAT: See attached sample input

DATA ENTRY PROCEDURE: To be determined

FREQUENCY OF UPDATE: May not be recurring--If updated, will not be more frequently than each 20-year period.

VOLUME OF UPDATE: To be determined

ARCHIVING REQUIREMENTS: Most likely will not be updated--if so, move old data to history file regardless of age and record new data. Retain historical data indefinitely.

ACCESS LIMITATIONS: Only soil scientists--locations to be determined later

SPECIAL EDIT/AUDIT/VALIDATION REQUIREMENTS: To be developed

REMARKS: Must be integrated with inputs SI-1, SI-4, SI-6, SI-9, and SI-12.

FOREST MANAGEMENT INTERPRETATIONS						
Soil Series Symbol	Soil Name	Forest Site Type Class	Productivity Site Index and Class ^{2/}	Regeneration Hazard (Bare Root)	Remarks	
(4683) 36	Witzel	Managed Type	(5751) (5750)	(4559) (4550)	(6954)	
1/ 370/n	Unnamed, northerly aspect	Douglas-fir	A 150-III (4)	Slight	Nonforest soils.	
1/ 370	Unnamed, southerly aspect	Douglas-fir	A 130-III (1)	Moderate	Soils with higher site index receive seepage water. Windthrow is a hazard in the Low Divide area. Soils with higher site index receive seepage water. Windthrow is a hazard in the Low Divide area.	
1/ 371/n	Unnamed, northerly aspect	Douglas-fir	A 115-IV (3)	Moderate		
1/ 371	Unnamed, southerly aspect	Douglas-fir	A 115-IV (3)	Severe		
1/ 372/n	Unnamed, northerly aspect	Douglas-fir	A 100-V (3)	Severe		
1/ 372	Unnamed, southerly aspect	Douglas-fir	A 80-V (1)	Severe		
1/ 380/n	Pollard, northerly aspect	Douglas-fir	A III	Slight		
1/ 380	Pollard, southerly aspect	Douglas-fir	A 145-III (3)	Moderate	Site class is lower near zones of low precipitation.	
1/ 381/n	Unnamed, northerly aspect	Douglas-fir	A 130-III (1)	Moderate		
1/ 381	Unnamed, southerly aspect	Douglas-fir	A 125-IV (2)	Severe		
1/ 382/n	Unnamed, northerly aspect	Douglas-fir	A 120-IV	Moderate	Site class data are from forest inventory records.	
1/ 382	Unnamed, southerly aspect	Douglas-fir	A 115-IV (5)	Moderate		
701/n	Unnamed, northerly aspect	Douglas-fir	B 80-V	Severe	Site class data are from SCS records.	
701	Unnamed, southerly aspect	Ponderosa pine	C 80-V	Severe	Site class data are from SCS records. Nonforest soils.	
704	Carney	--	--	--	Nonforest soils.	
705/n	Unnamed, northerly aspect	Douglas-fir	B 85-V	Severe	Site class data are from SCS records.	
705	Unnamed, southerly aspect	--	--	--	Nonforest soils.	
706/n	Medco, northerly aspect	Douglas-fir	A 90-V (1)	--	Site class data are from SCS records.	
706	Medco, southerly aspect	--	--	--	Nonforest soils.	
710	Coker	--	--	--	Nonforest soils.	
712/n	Jumpoff, northerly aspect	Douglas-fir	A 105-IV	Severe	Site class data are from forest inventory records.	
712	Jumpoff, southerly aspect	Douglas-fir	A 90-V	Severe	Site class data are from forest inventory records.	
715	Brader	--	--	--	Nonforest soils.	
716	Debenger	--	--	--	Nonforest soils.	
718/n	Beekman, northerly aspect	Douglas-fir	A 110 to 90-IV to V	Severe	Site class data are from SCS records. Productivity is higher at elevations above 5000 feet.	
718	Beekman, southerly aspect	Douglas-fir	A 95-V	Severe	Site class data are from forest inventory records.	

1/ Soils with measured data.

2/ From tables in Field Instructions for Integrated Forest Survey and Timber Management Inventories in Western Oregon, 1968. ELM, Portland, Oregon. The number in parentheses show number of plots examined with 3 to 5 trees per plot.

State: (0690) (0004)

District: (0543)

Soil Inventory Area: (4600)

Prog. Area: Watershed-Soils

Prep. By: G. Lipscomb

Date: 22 June 78

(Revision)

SI-6

DATA SOURCE DESCRIPTION
(DATA BASE MAINTENANCE)

TITLE/DESIGNATION: Range Management Interpretations, Revised BLM Form 7310-25

FORM: Coded data form

DESCRIPTION: A form on which range management interpretive data for soil taxonomic units are recorded for an inventory area.

PREPARATION RESPONSIBILITY: Soil Scientists at Resource Area Headquarters, District Office or State Office

FORMAT: see attached sample input

DATA ENTRY PROCEDURE: To be determined

FREQUENCY OF UPDATE: May not be recurring--if updated, will not be more frequently than each 20-year period.

VOLUME OF UPDATE: To be determined

ARCHIVING REQUIREMENTS: Most likely will not be updated--if so, move old data to history file regardless of age, and record new data. Retain historical data indefinitely.

ACCESS LIMITATIONS: Only soil scientists--locations to be determined later

SPECIAL EDIT/AUDIT/VALIDATION REQUIREMENTS: to be developed

REMARKS: Must be integrated with inputs SI-1, SI-4, SI-5, SI-9, and SI-12.

RANGE MANAGEMENT INTERPRETATIONS

State: (0690) (0004)

Soil Inventory Area: (4600)

District: (0543)

Soil Symbol (4683)	Soil Name (4648)	Vegetation Sub-Type (2706)	Key Species and Percent Cover (2631)	Percent Cover (3824)	Productive Capacity Potential (4534)	Normal Growing Season (0997) (0998)	Normal Grazing Season (3845)
* 36/n	Witzel, northerly aspect	--	--	--	--	--	--
* 36	Witzel, southerly aspect	--	--	--	--	--	--
*370	Unnamed	--	--	--	--	--	--
*371	Unnamed	--	--	--	--	--	--
*372	Unnamed	--	--	--	--	--	--
*380	Pollard	--	--	--	--	--	--
*381	Unnamed	--	--	--	--	--	--
*382	Unnamed	--	--	--	--	--	--
*701/n	Unnamed, northerly aspect	--	--	--	--	--	--
*701	Unnamed, southerly aspect	--	--	--	--	--	--
704	Carney, southerly aspect	Oak - Pine - Oatgrass	White oak Ponderosa pine California oatgrass Idaho fescue	35-50 5-15 50-65 1- 5	2-3	2/15-7/1	--
706	Medco, southerly aspect	Oak - Pine - Fescue	White oak Ponderosa pine Idaho fescue	50-70 Trace -3 35-45	2-5	2/15-6/15	--

* These soils are not now used for grazing, or information is not available.

MS-105

SI-9

Prog. Area: Watershed-Soils
Prep. By: G. Lipscomb
Date: 22 June 78
(Revised)

SI-9

DATA SOURCE DESCRIPTION
(DATA BASE MAINTENANCE)

TITLE/DESIGNATION: SVIM Soil-Description Field Data Form, S-1.

FORM: Coded data form

DESCRIPTION: A form used in the Soil-Vegetation Inventory Method for recording soil taxonomic unit data for the soils of an inventory area.

PREPARATION RESPONSIBILITY: Soil Scientist at Resource Area Headquarters, District Office or State Office

FORMAT: See attached sample input

DATA ENTRY PROCEDURE: To be determined

FREQUENCY OF UPDATE: May not be recurring--if updated, will not be more frequently than each 20-year period. Do not retain historical data.

VOLUME OF UPDATE: To be determined

ARCHIVING REQUIREMENTS: Most likely will not be updated--if so, move all data to history file regardless of age, and record new data.

ACCESS LIMITATIONS: Only Soil Scientists--locations to be determined later.

SPECIAL EDIT/AUDIT/VALIDATION REQUIREMENTS: To be developed

REMARKS: May be revised during development of Manual 1731. May replace BLM form 7310-9 (see SI-1). Must be integrated with inputs SI-1, SI-4, SI-5, SI-6, SI-9, and SI-12.

RECORD TYPE
STATE (06907)(0004)
DISTRICT (0543)
PLANNING UNIT (1075)
SOIL NUMBER (1683)
SOIL STATUS (4690)
ACTION (A=ADD. D=DELETE)

	S	1

Soil Type	(4648)	Date	(6630)	Collector	(6561)
Classification	(4687)				
Location	(4645)				
N. Veg.	(3705)	Climate	(0694) (4665) (4638)		
Parent Material	(4643)				
Land Form	(5132)				
Relief (4691)	Drainage	(4514)	Salt or Alkali	(4567)	
Elevation (0431)	Gr. Water	(4693)	Stoniness	(4655)	
Slope (3874)	Moisture	(4688)			
Aspect (6523)	Root Distirb.	(0755)	% Clay*	4605 / 4606 / 5311	
Erosion (4692)		(4605) (4606) (5311)	% Coarser than V.F.S.*	4605 / 4606 / 5311	
Permeability (4517)					

*Control section average

[illegible]

Additional notes (6954)

Prog. Area: Watershed-Soils
Prep. By: G. Lipscomb
Date: 22 June 78
(revision)

SI-12

DATA SOURCE DESCRIPTION
(DATA BASE MAINTENANCE)

TITLE/DESIGNATION: Soil Interpretations Record (SCS-SOILS-5, Modified for BLM Use).

FORM: Coded data form.

DESCRIPTION: A form for recording interpretive data for soil taxonomic units within an inventory area.

PREPARATION RESPONSIBILITY: Soil Scientists at Resource Area HQ, DO, or SO.

FORMAT: See attached sample input.

DATA ENTRY PROCEDURE: To be determined.

FREQUENCY OF UPDATE: May not require updating--if updated, will not be more frequently than each 20-year period.

VOLUME OF UPDATE: To be determined.

ARCHIVING REQUIREMENTS: Most likely will not be updated--if updated, move old data to history file regardless of age, and record new data. Retain historical data indefinitely.

ACCESS LIMITATIONS: Only Soil Scientists--locations to be determined later.

SPECIAL EDIT/AUDIT/VALIDATION REQUIREMENTS: To be developed.

REMARKS: Must be integrated with inputs SI-1, SI-4, SI-5, SI-6, and SI-9.

SOIL INTERPRETATIONS RECORD

SI-12

1 of 2

NAME OF SOIL INVENTORY AREA: (4600)

STATE (0004) (0690)

DISTRICT: (4543)

AUTHOR(S)

DATE (46630)

SOIL UNIT (4683)

SOIL NAME (4648)

CLASSIFICATION AND BRIEF SOIL DESCRIPTION

(4687) (4549)

FOOTNOTE

ESTIMATED SOIL PROPERTIES

DEPTH (IN)	USDA TEXTURE	UNIFIED	AASHO	FRACT. > 3 IN. (PCT)	PERCENT OF MATERIAL LESS THAN 3 IN. PASSING SIEVE	LIQUID LIMIT	PLASTICITY INDEX
PROP 041	(4547)	(4526) + (5311) ↓ (4523)	(4522) (5311)		4 10 40 200	(4605) (4606) (5311)	(4571) (4564) (5311) (5311)

DEPTH (IN)	CLAY (PCT OF <2MM)	MOIST BULK DENSITY (G/CM ³)	PERMEABILITY CLASS	AVAILABLE WATER CAPACITY (IN/IN)	SOIL REACTION (PH)	COMPACT. HAZARD	SHRINK-SWELL POTENTIAL	EROSION FACTORS K T	WIND EROD. GROUP	ORGANIC MATTER (PCT)	CORROSIONITY STEEL CONCRETE
PROP 051	(4547)	(4605) (4606) (5311)	(4544) (5311)	(4517) (5311)	(4533) (5311)	(4641) (4556) (5311)	(4635) (5311)	(4574) (4575)	(4576)	(4612) (5311)	(4540) (4534) (5311) (5311)

FLOODING	EROSION PRESENT SUSCEPT.	HIGH WATER TABLE DEPTH CLASS	CEMENTED PAN DEPTH	BEDROCK DEPTH	RUNOFF CLASS	HYD GRP	POTENTIAL FROST ACTION
PROP 051	(4557) (4518) (4515)	(4548)	(4546)	(4546)	(4520)		(4562) (4661)

FOOTNOTES	SANITARY FACILITIES	KEYING ONLY	FOOTNOTES	CONSTRUCTION MATERIAL
SEPTIC 071	(4573) SEPTIC TANK ABSORPTION FIELDS	FILL 191	(4573)	(4657)
LAGOON 081	SEWAGE LAGOONS	SAND 201	SAND and GRAVEL (4573)	(4657)
TRENCH 091	SANITARY LANDFILL (TRENCH)	GRAVEL 211	TOP SOIL (4573)	(4657)

CHAILING	VEGETATION MANIPULATION	SOIL 221	FOOTNOTES	WATER MANAGEMENT
SEEDING	(4657)		(4573)	(4657)
RANGELAND DRILL	(4657)		LOCATION	(4657)
RANGELAND FLOW	(4657)		PONDSE EMBANKMENTS	(4657)

FOOTNOTES	BUILDING SITE DEVELOPMENT	POBOPS 231	FOOTNOTES	WATER MANAGEMENT
EXCAV 121	4573 SHALLOW EXCAVATIONS	DIKES 241	(4573)	(4657)
DWEL 131	BUILDING SITES (4573)	PONDAC 251	WATERSPEEDING CONSTRUCTION (4573)	(4657)
DWEL 141	LANDSCAPE PLANTING (4573)	DRAIN 261	WATERSPEEDING TERRIGABILITY (4573)	(4657)
BLDGS 151	ROAD LOCATION (4573)	IRRIG 271	(4573)	(4657)
ROADS 161	LAWNS AND FAIRWAYS (4573)	TERRAC 281	TERRACING (4573)	(4657)
LAWNS 171		WATER 291	CONTOURING RIPPING (4573)	(4657)

FARMING	PITTING	TRENCHING
Dryland (4573) FARMING (4657)	4573 (4657)	4573 (4657)

Prog. Area: Watershed-Soils
Prep. By: G. Lipscomb
Date: 22 June 78
(Revision)

SI-13

DATA SOURCE DESCRIPTION
(DATA BASE MAINTENANCE)

TITLE/DESIGNATION: Soil Inventory Field Map.

FORM: Field map.

DESCRIPTION: A map at 7-1/2 or 15 minute quad scale containing boundaries of soil mapping units and a legend with names for each soil unit within an inventory area.

PREPARATION RESPONSIBILITY: Soil Scientist at Resource Area HQ, DO, or SO.

FORMAT: See attached sample input. Legend would consist only of mapping unit symbol and mapping unit name--description would be too lengthy for display on map.

DATA ENTRY PROCEDURE: To be determined.

FREQUENCY OF UPDATE: May not require updating--if updated, will not be more frequently than each 20-year period.

VOLUME OF UPDATE: To be determined.

ARCHIVING REQUIREMENTS: Most likely will not be updated--if updated, move old data to history file regardless of age, and record new data. Retain historical data indefinitely.

ACCESS LIMITATIONS: Only Soil Scientists--locations to be determined later.

SPECIAL EDIT/AUDIT/VALIDATION REQUIREMENTS: To be developed.

REMARKS: None.

Prog. Area: Watershed-Soils
Prep. By: G. Linscomb
Date: 22 June 78
(Revision)

SI-15

DATA SOURCE DESCRIPTION
(DATA BASE MAINTENANCE)

TITLE/DESIGNATION: Erosion Susceptibility Map

FORM: Field map.

DESCRIPTION: A map containing boundaries of erosion susceptibility classes together with classifications for permafrost and mantle stability problem areas within a planning area.

PREPARATION RESPONSIBILITY: Soil Scientists at Resource Area HQ, DO, or SO.

FORMAT: See attached sample input.

DATA ENTRY PROCEDURE: To be determined.

FREQUENCY OF UPDATE: May not require updating--if updated, will not be more frequently than each 20-year period.

VOLUME OF UPDATE: To be determined.

ARCHIVING REQUIREMENTS: Most likely will not be updated--if updated, move old data to history file regardless of age, and record new data. Retain historical data indefinitely.

ACCESS LIMITATIONS: Only Soil Scientists--locations to be determined later.

SPECIAL EDIT/AUDIT/VALIDATION REQUIREMENTS: To be developed.

REMARKS: None.

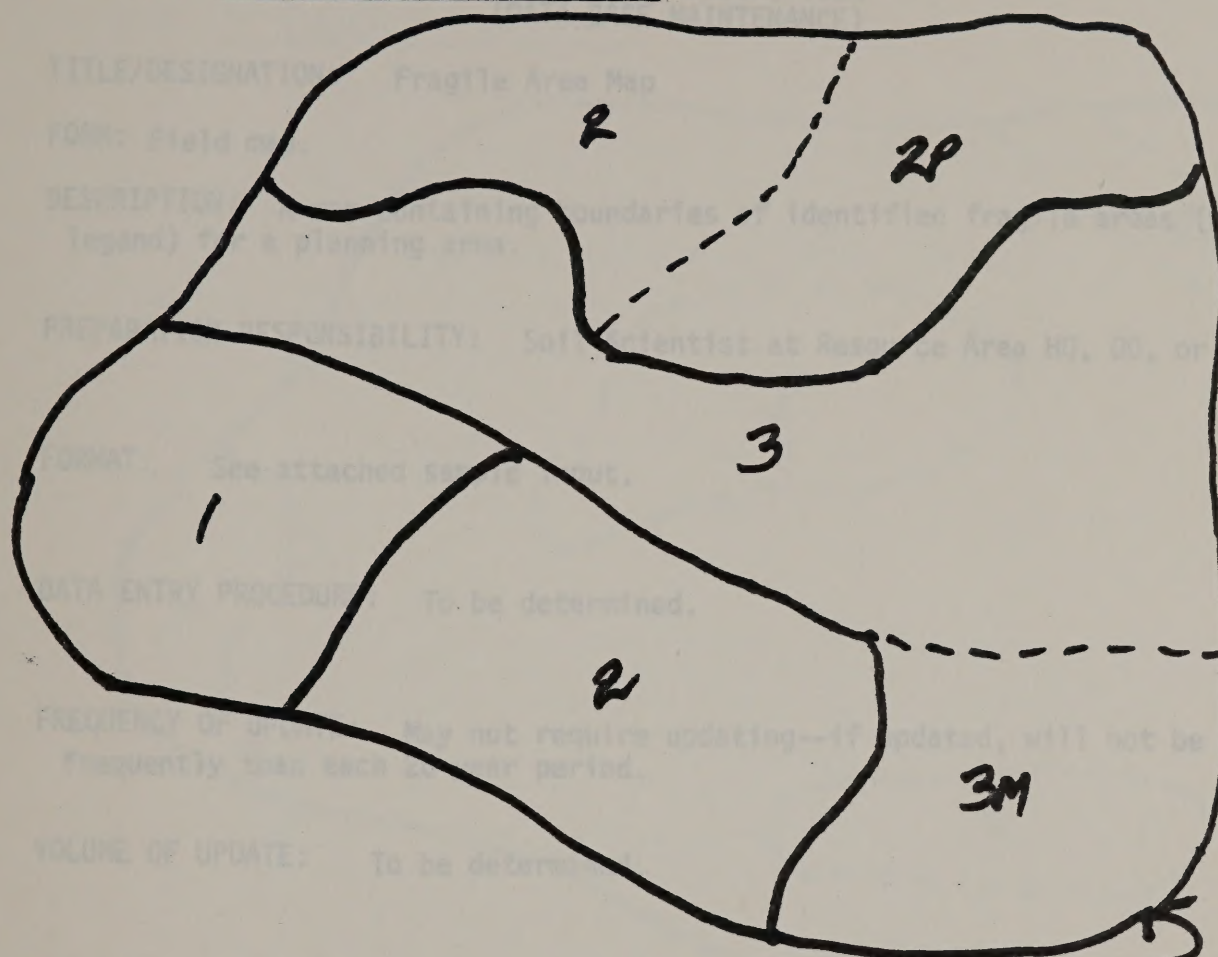
EROSION SUSCEPTIBILITY MAP

STATE (0004)(0690)

DATE (2302) (2306)

DISTRICT (0543)

P.U. (1075)

LEGEND

- 1 - Slight erosion susceptibility
- 2 - Moderate erosion susceptibility
- 3 - Severe erosion susceptibility
- P - Permafrost area
- M - Mantle stability problem area

(4515)

Boundary of
Planning Unit

Prog. Area: Watershed-Soils

Prep. By: G. Lipscomb

Date: 22 June 78

(Revision)

SI-16

DATA SOURCE DESCRIPTION
(DATA BASE MAINTENANCE)

TITLE/DESIGNATION: Fragile Area Map

FORM: Field map.

DESCRIPTION: A map containing boundaries of identified fragile areas (with legend) for a planning area.

PREPARATION RESPONSIBILITY: Soil Scientist at Resource Area HQ, DO, or SO.

FORMAT: See attached sample input.

DATA ENTRY PROCEDURE: To be determined.

FREQUENCY OF UPDATE: May not require updating--if updated, will not be more frequently than each 20-year period.

VOLUME OF UPDATE: To be determined.

ARCHIVING REQUIREMENTS: Most likely will not be updated--if updated, move old data to history file regardless of age, and record new data. Retain historical data indefinitely.

ACCESS LIMITATIONS: Only Soil Scientists--locations to be determined.

SPECIAL EDIT/AUDIT/VALIDATION REQUIREMENTS: To be developed.

REMARKS: None.

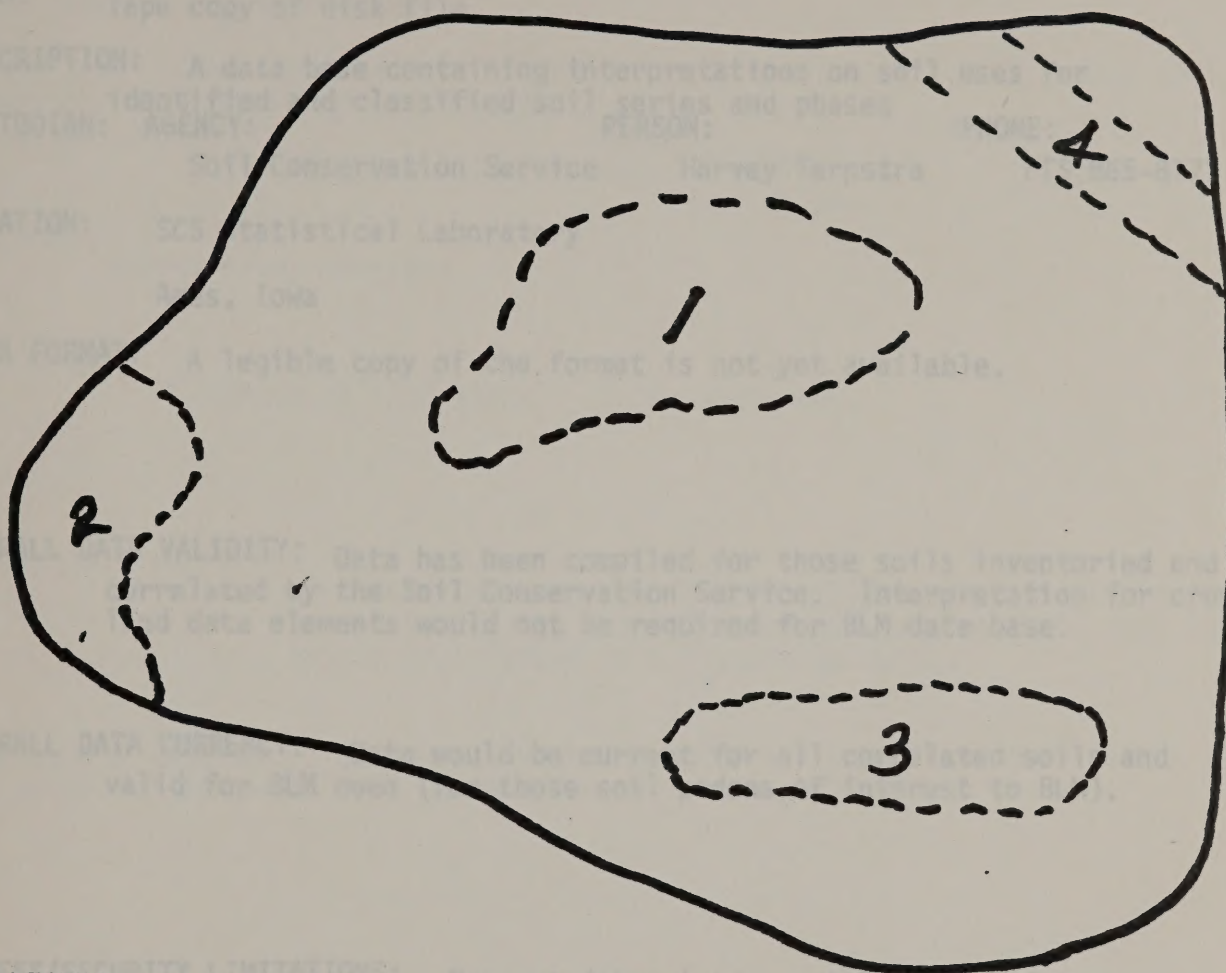
FRAGILE AREA MAP

STATE (0004) (0690)

DATE (2302) (2306)

DISTRICT (0543)

P.U. (1075)

LEGEND

- 1 - Landslide hazard area in Tyee sandstone
- 2 - Shallow soil area
- 3 - Steep south exposure (4681)
- 4 - Fault zone

Prog. Area: Watershed - Soils
Prep. By: H. Lipscomb
Date: 22 June 78
(Revision)

SI-17

DATA SOURCE DESCRIPTION
(INITIAL DATA BASE GENERATION)

TITLE OF SOURCE: Soil Interpretations Record, SCS

FORM: Tape copy of disk file

DESCRIPTION: A data base containing interpretations on soil uses for
identified and classified soil series and phases

CUSTODIAN: AGENCY: Soil Conservation Service PERSON: Harvey Terpstra PHONE: FTS 865-8177

LOCATION: SCS Statistical Laboratory

Ames, Iowa

DATA FORMAT: A legible copy of the format is not yet available.

OVERALL DATA VALIDITY: Data has been compiled for those soils inventoried and correlated by the Soil Conservation Service. Interpretation for cropland data elements would not be required for BLM data base.

OVERALL DATA CURRENCY: Data would be current for all correlated soils and valid for BLM need (for those soil pedons of interest to BLM).

ACCESS/SECURITY LIMITATIONS: Not yet determined -- will require future contacts with SCS.

ESTIMATED VOLUME: Unknown at present time -- will require followup with SCS.

REMARKS: None

WS-117

SI-18
Prog. Area: Watershed - Soils
Prep. By: G. Lipscomb
Date: 22 June 78
(Revision)

DATA SOURCE DESCRIPTION
(INITIAL DATA BASE GENERATION)

SI-18

TITLE OF SOURCE: Pedon Data System, SCS

FORM: Tape copy of disk file

DESCRIPTION: Consists of a description for each horizon of a soil pedon, soil laboratory data, and engineering data.

CUSTODIAN: AGENCY: Soil Conservation Service PERSON: Clayton Miller PHONE: 202-447-7705

LOCATION: Hyattsville, Maryland

DATA FORMAT: Unknown at this time -- to be determined.

OVERALL DATA VALIDITY:

Data has been compiled for those soils inventoried and correlated by the Soil Conservation Service. All data for pedons of interest to BLM would be valid.

OVERALL DATA CURRENCY: Data would be current for all correlated soil pedons and valid for BLM needs (for those pedons of interest to BLM).

ACCESS/SECURITY LIMITATIONS:

Not yet determined -- will require future contacts with the SCS.

ESTIMATED VOLUME: Unknown at the present time -- will require followup with SCS.

REMARKS: None

SI-19

Prog. Area: Watershed-Soils

Prep. By: G. Lipscomb

Date: 22 June 78

(Revision)

DATA SOURCE DESCRIPTION
(DATA BASE MAINTENANCE)

TITLE/DESIGNATION:

Soil Inventory Narrative

FORM:

Narrative

DESCRIPTION:

An inventory narrative which describes the attributes of soil mapping units, taxonomic units, and associations.

PREPARATION RESPONSIBILITY:

Soil Scientist at RAH or DO

FORMAT:

See attached sample input

DATA ENTRY PROCEDURE:

To be determined

FREQUENCY OF UPDATE:

May not be recurring--if updated,, will not be more frequently than each 20 year period.

VOLUME OF UPDATE:

To be determined

ARCHIVING REQUIREMENTS:

Most likely will not require updating-- if so, discard old narrative and record new.

ACCESS LIMITATIONS:

Only soil scientists may input-- locations to be determined later.

SPECIAL EDIT/AUDIT/VALIDATION REQUIREMENTS:

To be developed

REMARKS:

None

Proj. Area: Watershed-Soils
Prep. By: S. Lipscomb
Date: SI-19 June 78

(Revised)

DATA SOURCE DESCRIPTION
(DATA BASE MAINTENANCE)

SOIL INVENTORY NARRATIVE

TITLE/DESIGNATION: Emission Susceptibility Narrative

FORM: Narrative

DESCRIPTION: The soils are described by describing the emission susceptibility of

State: {0690} (0004)

Date: (2302) (2306)

District: {0543}

Name, Soil Inventory Area: {4600}

PREPARATION RESPONSIBILITY:

Soil Scientist or Planner at RAS or SO.

Mapping Units:

806-R/VW 1,840 acres. Slopes dominantly are southerly and about
cent of the area has gradients of 0 to 10 percent and 30
percent has gradients of 10 to 35 percent. This unit con-
tains about 80 percent of the shallow 806 soils and 20
percent of {R} rock land.

Inclusions consist of the moderately deep 809 soils and
what poorly-drained unclassified soils in drainageways.

806-R/X 1,730 acres. Slopes dominantly are southerly and have
gradients of 35 to 60 percent. This unit contains about
75 percent of shallow 806 soils and 25 percent of {R}
rock land.

Inclusions consist of the moderately deep 809 soils.
(4549), (4550), (4566), (4646), (4668)

ACCESS LIMITATIONS: Only soil scientists may input-- locations to be
determined later.

SPECIAL EDIT/REVIEW/VALIDATION REQUIREMENTS: To be developed.

REMARKS: None

SI-20

Prog. Area: Watershed-Soils
Prep. By: G. Lipscomb
Date: 22 June 78 —

(Revision)

DATA SOURCE DESCRIPTION
(DATA BASE MAINTENANCE)

TITLE/DESIGNATION: Erosion Susceptibility Narrative

FORM: Narrative

DESCRIPTION: A URA Step 2 narrative describing the erosion susceptibility of the soils within a planning area

PREPARATION RESPONSIBILITY:

State: Colorado Soil Scientist or Planner at RAH or DO. (2300)

District: 0593

Planning Unit: (1075)

FORMAT:

See attached sample input

DATA ENTRY PROCEDURE:

To be determined

FREQUENCY OF UPDATE:

May not require updating-- if updated, will not be more frequently than each 20-year period.

VOLUME OF UPDATE:

To be determined

ARCHIVING REQUIREMENTS:

Most likely will not be updated-- if updated, discard old data and record new.

ACCESS LIMITATIONS:

Only soil scientists may input-- locations to be determined later.

SPECIAL EDIT/AUDIT/VALIDATION REQUIREMENTS:

To be developed.

REMARKS:

None

SI-21

DATA SOURCE DESCRIPTION
(DATA BASE MAINTENANCE)

TITLE/DESIGNATION: Fragile Area Narrative

FORM: Narrative

DESCRIPTION: A USA Step 2 narrative describing fragile areas for a planning area.

PREPARATION EROSION SUSCEPTIBILITY NARRATIVE DOs, and SOs.

State: {0004} {0690}

Date: (2302) (2306)

District: {0543}

FORMAT: See Planning Unit: (1075)

DATA ENTRY Erosion Susceptibility is
.. (4679) ..

FREQUENCY OF UPDATE:

May not be recurring - if updated, will not be more frequently than each 20-year period.

VOLUME OF Permafrost is found
.. (4679) ..

ARCHIVING REQUIREMENTS:

Most likely will not be updated-- if updated, discard
.. Mantle stability problems consist of
.. (4679) ..

ACCESS LIMITATIONS:

Only soil scientists may input-- locations to be determined later.

SPECIAL EDIT/AUDIT/VALIDATION REQUIREMENTS:

To be developed.

REMARKS:

None

Prog. Area: Watershed-Soils

Prep. By: G. Lipscomb

Date: 22 June 78

(Revision)

SI-21

DATA SOURCE DESCRIPTION
(DATA BASE MAINTENANCE)

TITLE/DESIGNATION: Fragile Area Narrative

FORM: Narrative

DESCRIPTION: A URA Step 2 narrative describing fragile areas for a planning area.

PREPARATION RESPONSIBILITY: Soil Scientist at RAHs, DOs, and SOs.

FORMAT: See attached sample input

DATA ENTRY PROCEDURE: To be determined.

FREQUENCY OF UPDATE:

May not be recurring - if updated, will not be more frequently than each 20-year period.

VOLUME OF UPDATE:

To be determined.

ARCHIVING REQUIREMENTS:

Most likely will not be updated-- if updated, discard old data and record new.

ACCESS LIMITATIONS:

Only soil scientists may input-- locations to be determined later.

SPECIAL EDIT/AUDIT/VALIDATION REQUIREMENTS: To be developed.

REMARKS:

None

SI-21

Prog. Area: Watershed-V/C

Prep. By: G. Livacore

Date: 22 June 76

(Revision)

VI-2

DATA SOURCE DESCRIPTION
(DATA BASE MAINTENANCE)

TITLE/DESIGNATION: Watershed Conservation and Development Field Data
BLM Form 7190-12

Form: Coded Data Form

FRAGILE AREA NARRATIVE

DESCRIPTION: A form for recording watershed area, vegetal sub-type, and transect data in the WCD inventory.

State: {0004} {0690}

Date: (2302) (2306)

District: {0543}

Planning Unit: {1075}

PREPARATION RESPONSIBILITY: Watershed Specialist at Resource Area Headquarters or District Office

A severe landslide area exists

.

FORMAT: See attached

(4680) (4681)

DATA ENTRY PROCEDURE: To be determined

The shallow soils on the west side

.

(4680) (4681)

FREQUENCY OF UPDATE: No update expected for this input form (see remarks)

VOLUME OF UPDATE: None

ARCHIVING REQUIREMENTS: Upon updating with VI-2 (SWM Inventory), move old data to history file regardless of age. Retain historical data indefinitely.

ACCESS LIMITATIONS: To be determined

SPECIAL EDIT/AUDIT/VALIDATION REQUIREMENTS: See current ADP Programs W002, W003, W004, and W005.

REMARKS: This input form is used in current ADP System UD08, W002, for recording watershed area, vegetal sub-type, and transect data. Updating is expected to come from the Soil-Vegetation Inventory Method, V-1, SWM Transect Data Form.

Prog. Area: Watershed-V/C

Prep. By: G. Lipscomb

Date: 22 June 78

(Revision)

VI-1

DATA SOURCE DESCRIPTION
(DATA BASE MAINTENANCE)

TITLE/DESIGNATION: Watershed Conservation and Development Field Data;
BLM Form 7330-12

FORM: Coded Data Form

DESCRIPTION: A form for recording watershed area, vegetal subtype, and transect data in the WC&D inventory.

PREPARATION RESPONSIBILITY: Watershed Specialist at Resource Area Headquarters
or District Office

FORMAT: See attached sample input

DATA ENTRY PROCEDURE: To be determined

FREQUENCY OF UPDATE: No update expected for this input form (see remarks)

VOLUME OF UPDATE: None

ARCHIVING REQUIREMENTS: Upon updating with VI- 2 (SVIM Inventory), move old data to history file regardless of age. Retain historical data indefinitely.

ACCESS LIMITATIONS: To be determined

SPECIAL EDIT/AUDIT/VALIDATION REQUIREMENTS: See current ADP Programs M062, M063
MO 64 and M065.

REMARKS: This input form is used in current ADP System 0008, WC&D, for recording watershed area, vegetal subtype, and transect data. Updating is expected to come from the Soil-Vegetation Inventory Method, V-1, SVIM Transect Data Form.

VI-1
Sheet 1 of 2

By

1. Transaction Code (1) <input type="checkbox"/> Correction <input type="checkbox"/> Delete	2. State (2-3) (0004) (0690)	3. District (4-5) (0543)	4. Watershed Area (W.A) (6-8) (0691)
SECTION I - GENERAL WATERSHED AREA DESCRIPTION (FORMAT B)			
5. County (10-12) (0546)	6. Sub-basin (13-14) (5304)	7. Total Acres (15-20) (6520)	8. Name of Watershed Area (21-40) (0693)
9. Annual precipitation (inches) (41-43) (0694)	10. Month of peak flow (44-45) (0695)	11. Date of survey (month and year) (46-49) (6630)	

12. Is there flood and sediment damage to manmade facilities?
a. Present (If damages equal more than \$100 annually insert Y, if not N) ☐ (50)
b. Future (with urban expansion or other development) Y or N ☐ (51) (4702)
13. Does it originate within the Watershed area? Y, N, or Partly ☐ (52) (4703)
(If "no" or "partly," what primary areas? ST, DL, WA) (Format D 10-58) ---, ---, --- (0732)
---, ---, --- (0697)
---, ---, ---
- (number of Watershed given) (53) (4704)
14. What is presently flooded? ☐ Agriculture (54) ☐ Urban (55) ☐ Public (56) ☐ Industrial (57)
15. Is there an opportunity to reduce the damage? Y or N ☐ (58)
16. Are there water quality problems? Y or N ☐ (59)
17. Does it originate within the Watershed area? Y, N, or P ☐ (60)
(If "no" or "partly," what primary areas? ST, DL, WA) (Format F 10-58) ---, ---, --- (0705)
---, ---, --- (0708)
---, ---, --- (0709)
---, ---, --- (0710)
- (number of Watershed given) (61) (0707)
18. For what use and intensity is it a problem? (High, Medium, Low)
☐ Domestic (62) ☐ Live stock (65) (0711)
☐ Fish & Wildlife (63) ☐ Recreation (66) (0712)
☐ Industrial (64) ☐ (67) ---, ---, --- (Format H 10-29) (0713)
(0706)
19. What is the probable source(s) of the problem?
☐ Chemical treatment (68) ☐ Mineral exploration (72) ☐ Other recreation (76) (4705)
☐ Construction practices (69) ☐ Mineral extraction (73) ☐ Timber harvesting practices (77) (0735)
☐ Forage utilization practices (70) ☐ Natural situation (74) ☐ Public purposes (78)
☐ Gully erosion (71) ☐ Off-road vehicular use (75) ☐ Private land use (79)
☐ (80) ---, ---, --- (Format J 10-29)

[illegible]

SECTION III - TRANSECT DATA (FORMAT H)

LINE	TRANSECT IDENTIFICATION				(18-19) PERCENT OF VEGETAL SUBTYPE (0749)	PERCENT OF GROUND COVER					(30-31) EFFECTIVE ROOT DEPTH (0755)	SOIL TEXTURE		(34-35) PERCENT OF SLOPE (3874)	SOIL SURFACE FACTOR				TREATMENTS														
	(10-11) PLANNING UNIT (1075)	(12-14) VEGETAL SUBTYPE (2706)	(15) EXPOSURE (6523)	(16-17) NUMBER (3508)		(20-21) VEGE- TATION (0750)	(22-23) LITTER (0751)	(24-25) SMALL ROCK (0752)	(26-27) LARGE ROCK (0753)	(28-29) BARE GROUND (0754)		(32) 1/4" - 4" (4709)	(33) 4" + (4710)		(36-37) PRESENT (4712)	(38-39) WITHOUT MANAGEMENT CHANGE (0757)	(40-41) LAND USE MANAGEMENT CHANGE (0758)	(42-43) WITH ADDITIONAL TREATMENTS (0759)	VEGETAL MANIPULATION		(46) WATERSHED TILLAGE (u)	(47) WATER CONTROL (v)											
	(a)	(b)	(c)	(d)		(e)	(f)	(g)	(h)	(i)	(j)									(44) CHEM- ICAL (s)	(45) MECHAN- ICAL (t)												
1																																	
2																																	
3																																	
4																																	
5																																	
6																																	
7																																	
8																																	
9																																	
10																																	
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12																																	
13																																	
14																																	
15																																	
16																																	

Prog. Area: Watershed-V/C
Prep. By: G. Lipscomb
Date: 22 June 78
(Revision)

VI-5

DATA SOURCE DESCRIPTION
(DATA BASE MAINTENANCE)

TITLE/DESIGNATION: Land Treatments and Management Facilities Map

FORM: A field map with legend

DESCRIPTION: An overlay for a base map showing locations of land treatment and management facility projects for a planning area (URA 2).

PREPARATION RESPONSIBILITY: Watershed Specialist, Planner or Range Specialist at Resource Area Headquarters or District Office.

FORMAT: See attached sample input.

DATA ENTRY PROCEDURE: To be determined.

FREQUENCY OF UPDATE: Each 10 years as URA/MFP updates are completed.

VOLUME OF UPDATE: 60 forms per year for all Bureau offices.

ARCHIVING REQUIREMENTS: Upon update, replace old data with new and discard old data.

ACCESS LIMITATIONS: To be determined.

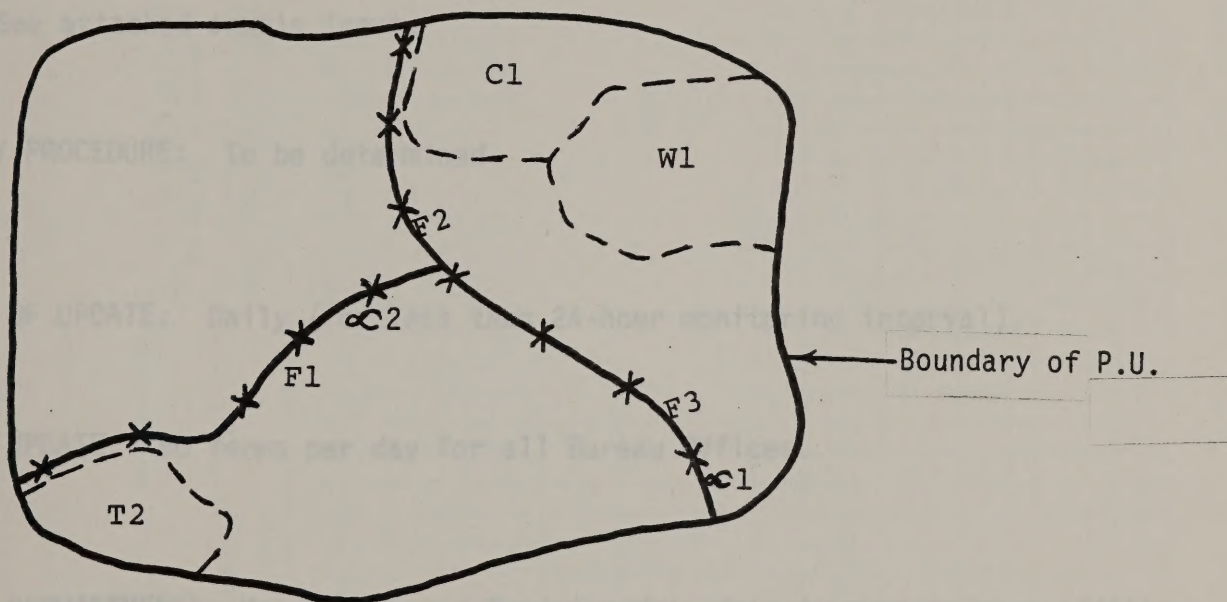
SPECIAL EDIT/AUDIT/VALIDATION REQUIREMENTS: To be developed.

REMARKS: This input is a current requirement of Step 2, URA.

LAND TREATMENTS AND MANAGEMENT FACILITIES OVERLAY

State (0004/0690)
 District (0543)
 P.U. (1075)

Date (2302) (2306)

LEGEND:

- F1 - Allotment A Boundary Fence
- F2 - Allotment B Boundary Fence
- (5464) F3 - Allotment C Boundary Fence
- C1 - Chemical Sagebrush Manipulation
- T2 - Mechanical P-J Manipulation by Chaining
- W1 - Contour Furrowing in burned sagebrush
- ⊙1 - Comparison Area for Big Sagebrush Site
- ⊙2 - Comparison Area for P-J Site

LAND TREATMENT AND MANAGEMENT FACILITIES SHEET AT

Date (2002) (2004)

State (INDONESIA)
District (0243)
P.O. (1075)



Legend

- CI - (Closed) Sagarush Distribution
- T2 - (Closed) P-4 Distribution by Chaining
- WI - Contour Forming in closed sagarush
- OC1 - Contour Area for the Sagarush Site
- OC2 - Contour Area for P-4 Site
- FI - Affected A Boundary Fence
- F2 - Affected B Boundary Fence
- F3 - Affected C Boundary Fence

Prog. Area: Watershed-Air

Prep. By: G. Lipscomb

Date: 22 June 78

AI-2

(Revision)

DATA SOURCE DESCRIPTION
(DATA BASE MAINTENANCE)

TITLE/DESIGNATION: HOURLY AIR QUALITY DATA FORM

FORM: Coded Data Form

DESCRIPTION: A data form for recording less than 24-hour air quality data at a monitoring site.

PREPARATION RESPONSIBILITY: Air Quality Specialist or Air Resources Specialist at District Office or State Office.

FORMAT: See attached sample input.

DATA ENTRY PROCEDURE: To be determined.

FREQUENCY OF UPDATE: Daily (for less than 24-hour monitoring interval).

VOLUME OF UPDATE: 50 forms per day for all Bureau Offices.

ARCHIVING REQUIREMENTS: Maintain one calendar year's data in system--upon addition of another year's data, make required analysis of past year's data and transfer to history file which is to be maintained for the life of the monitoring station record.

ACCESS LIMITATIONS: To be determined.

SPECIAL EDIT/AUDIT/VALIDATION REQUIREMENTS: To be developed.

REMARKS: None

1/16/1962

1/16/1962

(continued)

5-1A

RECEIVED 1962 APR 16
(RECEIVED 1962 APR 16)

RECEIVED 1962 APR 16

RECEIVED 1962 APR 16

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RECEIVED 1962 APR 16

RECEIVED 1962 APR 16

LESS THAN 24-HOUR SAMPLING INTERVAL

1 (Name For 4905)
 1 Agency
 (0935)
 City Name
 (0934)
 Site Address
 (Name For 4902)

Hourly Air Quality Data Form

(0690) (0543)
 (0004) (1075) (4910)

State Site
 2 3 4 5 6 7 8 9 10
 (4905) Agency Project Time Year Month
 (4937) ← Name → (4928)
 Parameter observed Method
 (4925) ← Name → (4930)
 Time interval of obs. Units of obs.
 Parameter code Method Units
 23 24 25 26 27 (4928) (4930) 32

Project
 Day St Hr Rdg 1 Rdg 2 Rdg 3 Rdg 4 Rdg 5 Rdg 6 Rdg 7 Rdg 8 Rdg 9 Rdg 10 Rdg 11 Rdg 12
 19 20 21 22 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80

(4929)

Prog. Area: Watershed-Air

Prep. By: G. Linscomb

Date: 22 June 78

(Revision)

AI-3

DATA SOURCE DESCRIPTION
(DATA BASE MAINTENANCE)

TITLE/DESIGNATION: DAILY AIR QUALITY DATA FORM

FORM: Coded Data Form

DESCRIPTION: A data form for recording 24-hour or greater sampling interval air quality data at a monitoring site.

PREPARATION RESPONSIBILITY: Air Quality Specialist or Air Resources Specialist at District Office, State Office, or Resource Area Headquarters.

FORMAT: See attached sample input.

DATA ENTRY PROCEDURE: To be determined.

FREQUENCY OF UPDATE: Monthly (for 24-hour or greater sampling interval)

VOLUME OF UPDATE: 150 forms per month for all Bureau offices

ARCHIVING REQUIREMENTS: Maintain one calendar year's data in system--upon addition of another year's data, make required analyses of previous year's data, and transfer to history file which is to be maintained for the life of the monitoring station record.

ACCESS LIMITATIONS: To be determined.

SPECIAL EDIT/AUDIT/VALIDATION REQUIREMENTS: To be developed.

REMARKS: None

Daily Air Quality Data

24-HOUR OR GREATER SAMPLING INTERVAL

2 (Name For 4905)
 1 Agency (0935)
 City Name (0934)
 Site Address (Name For 4902)
 Project (4925)
 Time Interval

(0690) (0543)
 (0004) (1075) (4910)
 State Area Site
 2 3 4 5 6 7 8 9 10
 Agency Project Time Year Month
 11 12 13 14 15 16 17 18
 (4905) (4902) (4930) (4926)

Name PARAMETER Code		Name PARAMETER Code		Name PARAMETER Code		Name PARAMETER Code			
23 24 25 26 27		37 38 39 40 41		51 52 53 54 55		65 66 67 68 69			
Method Units		Method Units		Method Units		Method Units			
28 29 30 31		42 43 44 45		56 57 58 59		70 71 72 73			
Day	St Hr	33 34 35 36		47 48 49 50		61 62 63 64		75 76 77 78	
19	20								
0	1								
0	2								
0	3								
0	4								
0	5								
0	6								
0	7								
0	8								
0	9								
1	0								
1	1								
1	2								
1	3								
1	4								
1	5								
1	6								
1	7								
1	8								
1	9								
2	0								
2	1								
2	2								
2	3								
2	4								
2	5								
2	6								
2	7								
2	8								
2	9								
3	0								
3	1								

DP → 4 3 2 1 0 4 3 2 1 0 4 3 2 1 0 4 3 2 1 0

(4929)
 Daily Air Quality Data Form. (modified for BLM use)

Prog. Area: Watershed-Air
Prep. By: G. Lipscomb
Date: 22 June 78
(Revision)

AI-4

CLIMATOLOGICAL STATION DATA FORM
DATA SOURCE DESCRIPTION
(DATA BASE MAINTENANCE)

TITLE/DESIGNATION: CLIMATOLOGICAL STATION DATA FORM

FORM: Coded Data Form

DESCRIPTION: A data form for recording climatic data at climatological data stations.

PREPARATION RESPONSIBILITY: Air Resources Specialist, Meteorologist, or Hydrologist
at Resource Area Headquarters, District Office or State
Office.

FORMAT: See attached sample input (data elements only--format design not available).

DATA ENTRY PROCEDURE: To be determined.

FREQUENCY OF UPDATE: Daily (for less than 24-hour time interval) and Monthly (for
24-hour or greater time interval).

VOLUME OF UPDATE: 50 forms per day for all Bureau Offices plus 150 forms per month
for all Bureau Offices.

ARCHIVING REQUIREMENTS: Maintain one calendar year's data in system--upon addition
of another year's data, make required analyses of previous year's data and
transfer to history file which is to be maintained for the life of the monitoring
station record.

ACCESS LIMITATIONS: To be determined.

SPECIAL EDIT/AUDIT/VALIDATION REQUIREMENTS: To be developed.

REMARKS: None

CLIMATOLOGICAL STATION DATA FORM

1. State, Administrative (100-0004) or State, Administrative (100-0690)
2. District, Administrative (100-0543)
3. Name, Climatological Station (143-4914)
4. Number, Climatological Station (181-8515)
5. County, etc. (100-0546)
6. Code, Watershed (145-5304)
7. Latitude (100-1236)
8. Longitude (100-1237)
9. Elevation (100-0431)
10. Agency (100-2576)
11. Parameter, Climatological (100-5377)
12. Value, Climatological Parameter (100-5376)
13. Date, Recorded (100-8518)
14. Time (100-6926)
15. Time Interval For Measurement (143-4925)
16. Method, Measurement (100-5311)
17. Initials, Recorder, Collector (100-6546)

AI-6

Prog. Area: Watershed-Air

Prep. By: G. Lipscomb

Date: 22 June 78

(Revision)

DATA SOURCE DESCRIPTION
(DATA BASE MAINTENANCE)

TITLE/DESIGNATION: AIR RESOURCES INVENTORY MAP

FORM: A field map

DESCRIPTION: A map containing air resources data for an inventory area.

PREPARATION RESPONSIBILITY: Air Resources Specialist or Meteorologist at
Resource Area Headquarters or District Office.

FORMAT: See attached sample input.

DATA ENTRY PROCEDURE: To be determined.

FREQUENCY OF UPDATE: Each 10 years as new air resources inventory data is
compiled.

VOLUME OF UPDATE: 60 maps per year inclusive for all Bureau offices.

ARCHIVING REQUIREMENTS: When updated, move old data to archives and record
new map data.

ACCESS LIMITATIONS: To be determined

SPECIAL EDIT/AUDIT/VALIDATION REQUIREMENTS: To be developed

REMARKS: None

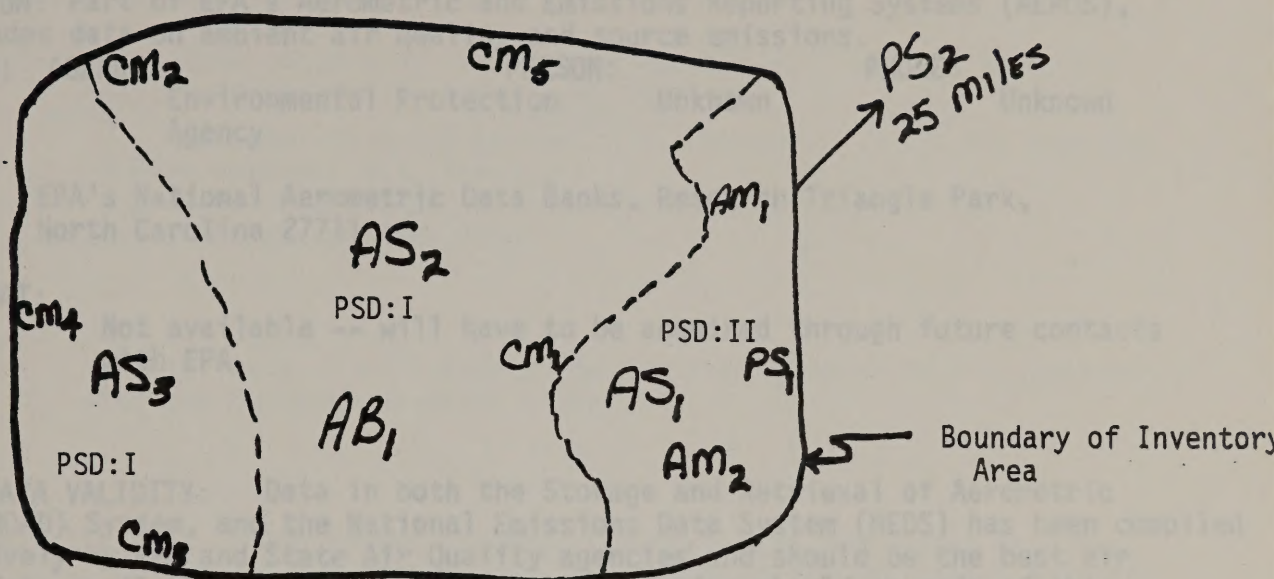
AIR RESOURCES INVENTORY MAP

STATE (0004)(0690)

DATE (2302) (2306)

DISTRICT (0543)

P.U. (1075)



LEGEND

- AM₁ - Air Quality Monitoring Site No. 001 (4910)
 AM₂ - Air Quality Monitoring Site No. 002
 CM₁ - Climatological Station Site No. 0001
 CM₂ - Climatological Station Site No. 0002
 CM₃ - Climatological Station Site No. 0003 (8515)
 CM₄ - Climatological Station Site No. 0004
 CM₅ - Climatological Station Site No. 0005
 PS₁ - Point Emission Source (Sawmill Burner)
 PS₂ - Point Emission Source (Coal-Fired Power plant)

AS₁ - Sawmill Airshed, No. 1

AS₂ - Middle Airshed No. 2 (4978)

AS₃ - Clean Airshed No. 3

AB₁ - Colorado Air Basin No. 1 (4959)

PSD:I - Class I, Prevention of Significant Deterioration (4987)

Prog. Area: Watershed - Air
Prep. By: G. Lipscomb
Date: 22 June 78
(Revision)

DATA SOURCE DESCRIPTION
(INITIAL DATA BASE GENERATION)

AI-9

TITLE OF SOURCE: EPA's SAROAD and NEDS Data Systems

FORM: Probably magnetic tape

DESCRIPTION: Part of EPA's Aerometric and Emissions Reporting Systems (AEROS), and includes data on ambient air quality and source emissions.

CUSTODIAN: AGENCY: Environmental Protection Agency PERSON: Unknown PHONE: Unknown

LOCATION: EPA's National Aerometric Data Banks, Research Triangle Park, North Carolina 27711

DATA FORMAT: Not available -- will have to be acquired through future contacts with EPA.

OVERALL DATA VALIDITY: Data in both the Storage and Retrieval of Aerometric Data (SAROAD) System, and the National Emissions Data System (NEDS) has been compiled cooperatively by EPA and State Air Quality agencies and should be the best air quality data available to BLM. (Additional evaluation should be made of this source).

OVERALL DATA CURRENCY: Both data banks are updated periodically as data is collected, compiled, and submitted by cooperating State agencies under agreements with EPA.

ACCESS/SECURITY LIMITATIONS: Not yet determined at present time -- will require future contacts with EPA.

ESTIMATED VOLUME: Unknown at present time -- will require followup with EPA.

REMARKS: None

Prog. Area: Watershed - Air
Prep. By: G. Lipscomb
Date: 22 June 78
(Revision)

DATA SOURCE DESCRIPTION
(INITIAL DATA BASE GENERATION)

AI-10

TITLE OF SOURCE: NOAA's National Climatic Center (NCC)

FORM: Probably Magnetic Tape

DESCRIPTION: A data bank containing surface and upper level climatic data for land, ocean and mobile (air, sea) stations.

CUSTODIAN: AGENCY: National Climatic Center PERSON: Unknown PHONE: FTS 672-0683
Environmental Data Service

LOCATION: National Oceanic and Atmospheric Administration
Asheville, North Carolina 28801

DATA FORMAT: Not available -- will have to be acquired through future contacts with the National Climatic Center.

OVERALL DATA VALIDITY: Data in the Climatic Centers' data bank comes from the weather station network of the Weather Service plus other miscellaneous stations and represents the best source of Climatic data.

OVERALL DATA CURRENCY: Data from land weather stations, which is of greatest interest to BLM, is continually collected and the data base updated accordingly. Therefore, source data should be current.

ACCESS/SECURITY LIMITATIONS: Not yet determined -- will require future contacts with the National Climatic Center.

ESTIMATED VOLUME: Unknown at present time -- will require followup with NOAA.

REMARKS: None

Prog. Area: Watershed-Geol.
Prep. By: G. Lipscomb
Date: 22 June 78
(Revision)

GI-1

DATA SOURCE DESCRIPTION
(DATA BASE MAINTENANCE)

TITLE/DESIGNATION: Spring Inventory Schedule (Modified USGS Form No. 9-1904-B)

FORM: Coded Data Form

DESCRIPTION: A field data form for recording water data at a spring site.

PREPARATION RESPONSIBILITY: Hydrologist or Geologist at Resource Area HQ,
DO, SO, or DSC.

FORMAT: See attached sample input.

DATA ENTRY PROCEDURE: To be determined.

FREQUENCY OF UPDATE: Each 10 years as new data is compiled for springs.

VOLUME OF UPDATE: 2 forms per day for all Bureau offices (see Preparation
Responsibility above).

ARCHIVING REQUIREMENTS: When updated, remove old data regardless of age and
move to history file, and record new data. Retain historical data indefinitely.

ACCESS LIMITATIONS: To be determined.

SPECIAL EDIT/AUDIT/VALIDATION REQUIREMENTS: To be developed.

REMARKS: None.

FORM NO. 9-1904-B (Modified for BLM use)

Recorded by (6561) Spring Inventory Schedule

Date (8518)

GENERAL SPRING DATA (1)

Site Ident No (1236) (1237) (5171)

Site-Type 2- 5- (5161)

Project No. 5- (0543)

District 6- (0690)

State 7- (0546)

County (or town) 8- (0004)

Latitude 9- (1236) Longitude 10- (1237)

Land-Long Accuracy 11- S F T M (0004)

Local Number 12- (5149)

Location Map 14- (6540)

Altitude 16- (0431)

Method of Measurement 17- A L M (5165)

Accuracy 18- (5167)

Type Setting 19- D C E F H K L S P S T U V W (5304)

Hydrologic Unit (DWDC) 20- (5186)

Use of Water 24- A B C D E F H I M N P R S T U Y Z

Secondary Water Use 25- Tertiary Use of Water 26- Source of Geohydrologic Data 36- (5147)

OWNER IDENTIFICATION (1)

R-158 T- A D M Date of Ownership 159 # (5152)

Name: Last 161- First 162- Middle Initial 163-

OTHER SITE IDENTIFICATION NUMBERS (1)

R-189 T- A D M Ident 190 # Assigner 191- (5153)

New Card Same R & T Ident 190 # Assigner 191-

SITE VISIT DATA (1)

R-186 T- A D M Date of Visit 187 # Name of Person 188- (5105)

FIELD WATER QUALITY MEASUREMENTS (1)

R-192 T- A D M Date 193 # Geohydrologic Unit 195 # (5150) (5104)

New Card Same R thru 195

Temperature 196 # 0.0 1.0 Degrees C 197- (5115)

Conductance 198 # 0.0 9.5 µ Mhos 199- (5116)

Other (STORET) Parameter 198 # Value 197- (5117)

Other (STORET) Parameter 198 # Value 197- (5118)

DISCHARGE DATA (1)

R-134 T- A D M Entry No 135 # Date 136- (5315) (5316) (5145)

Discharge 138- Source of Data 139- (5146)

Method of Measurement 140- C E F M S R U V W Z

FOOT NOTES:

① Source of Data Codes:

S D S A R L G Z
reporting, driller, owner, other go't, other logs, geologist, other reported, agency

OTHER SPRING DATA (1)

GI-1

2 of 2

R=171 * T= A D M * Spring's Name 172 =

(4061)

(5111) Type of Spring

173 = A B C D E F G H J K L P Q R S T Z *
artesian, perched, contact, depression, perched, fracture, geyser, perched, artesian, artesian, fracture, perched, perched, perched seepage, tubular, other
contact, depression, seepage, depression

(5110)

Persistence 174 = E G I P R S Z * Sphere of Discharge 175 = A W * (5109)
ebb & flow, geyser, intermittent, perennial, perched, seasonal, other Subequal, Subaqueous

(5108)

Improvements 176 = B C G H L N P R T Z * Number of Openings 177 = * (5107)
boxed, concrete, gallery, spring, lined, none, pond, pipe, trough, other
basin, houseFlow
Variability

178 = * *

Basis for
Variability

179 = A B C D E Z *

one year, 1-5 years, over 5 years, over year, less than, other
continuous continuous continuous intermittent A-D

GEOHYDROLOGIC UNIT DESCRIPTIONS (1)

R=90 * T= A D M *

(5104)

Unit Identifier 93 = * Lithology 96 = * Lithologic Modifier 97 = * (5188) (5189)

WATER QUALITY DATA COLLECTION NETWORK PARTICIPATION (1)

R=114 * T= A D M * Begin Year 115 # * End Year 116 = * Source Agency 117 = *
add, delete, modify
Frequency of Collection ② 118 = * Type of Analyses 120 = A B C D E F G H J K L M Z *
physical, common, trace, pesticides, nutrients, sanitary, codes, codes, codes, codes, codes, all or, other
chemical elements B&D B&E B&F D&E C,D&E none

Network Site

257 = *

(5157)

WATER PUMPAGE/WITHDRAWAL DATA COLLECTION NETWORK PARTICIPATION (1)

R=127 * T= A D M * Begin Year 128 # * End Year 129 = * Source Agency 130 = *
add, delete, modify
Frequency of Collection ② 131 = * Method of Collection 133 = C E M Z *
calculated, estimated, metered, other
Network Site 259 = *

OTHER DATA AVAILABLE (1)

R=180 * T= A D M * Type of Data 181 # * Loc 182 = C D Z * For mat 261 = F M P Z *
add, delete, modify
cooperator, district, other files, machine, published, other readable
New Card Same R & T Type of Data 181 # * Loc 182 = C D Z * For mat 261 = F M P Z *

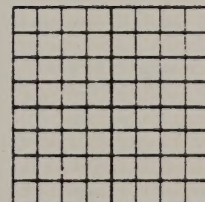
PERTINENT REMARKS (1)

R=183 * T= A * 185 = *
New Card Same R&T 185 = *
185 = *

(6954)

FOOT NOTES:

② Frequency of Collection Codes

A B C D F I M O Q S W Z
annual, bi-monthly, continuous, daily, semi-monthly, intermittent, monthly, one time, quarter, semi-weekly, other
monthly only annual annual

Prog. Area: Watershed-Geol.

Prep. By: G. Lipscomb

Date: 22 June 78

(Revision)

GI-2

DATA SOURCE DESCRIPTION
(DATA BASE MAINTENANCE)

TITLE/DESIGNATION: Ground-Water Site Inventory Schedule (Modified USGS
Form No. 9-1904-A).

FORM: Coded Data Form.

DESCRIPTION: A field data form for recording water data for ground-water sites
other than springs.

PREPARATION RESPONSIBILITY: Hydrologist or Geologist at Resource Area HQ,
DO, SO or DSC.

FORMAT: See attached sample input.

DATA ENTRY PROCEDURE: To be determined.

FREQUENCY OF UPDATE: Each 10 years as new data is compiled for ground-water
sites other than springs.

VOLUME OF UPDATE: 4 forms per day for all Bureau offices.

ARCHIVING REQUIREMENTS: When updated, remove old data regardless of age,
and move to history file, and record new data. Retain historical data
indefinitely.

ACCESS LIMITATIONS: To be determined.

SPECIAL EDIT/AUDIT/VALIDATION REQUIREMENTS: To be developed.

REMARKS: None.

Groundwater Site Inventory
Schedule

Date (8518)

(1236) (1237) (5157)

GENERAL SITE DATA (I)

Check One English Metric Units

Site Ident No

RG Number R=0

Transaction T= A D M V

Site Type 2= C D H I M P T W

Data 3= C U L M

Reporting Agency 4=

Project No 8=

District 6= (0543) (0690)

Country (or town) (0546)

Latitude 9=

Longitude 10=

Land-Long Accuracy 11= S F T M (0004)

Local Number 12=

Land Net Loc 13=

Scale 15=

Location Map 14=

Scale 15=

Scale 15=

Altitude 16=

Method of Measurement 17= A L M

Accuracy 18=

Type Setting 19=

Hydrologic Unit (OWDC) 20=

Date of First Construction/Completion 21=

Use of Site 23=

Source of Depth Data 29=

Use of Water 24=

Secondary Water Use 25=

Tertiary Use of Water 26=

Depth of Hole 27=

Depth of Well 28=

Source of Depth Data 29=

Water Level 30=

Date Measured 31=

Source 33=

Method of Measurement 34=

Site Status 37=

Source of Geohydrologic Data 38=

Date of Ownership 159=

First 162=

Middle Initial 163=

Name: Last 161=

First 162=

Middle Initial 163=

Name: Last 161=

First 162=

Middle Initial 163=

Name: Last 161=

First 162=

Middle Initial 163=

Name: Last 161=

First 162=

Middle Initial 163=

Name: Last 161=

First 162=

Middle Initial 163=

Name: Last 161=

First 162=

Middle Initial 163=

Name: Last 161=

First 162=

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Middle Initial 163=

Name: Last 161=

First 162=

Middle Initial 163=

Name: Last 161=

First 162=

Middle Initial 163=

Name: Last 161=

First 162=

Middle Initial 163=

Name: Last 161=

First 162=

Middle Initial 163=

Name: Last 161=

First 162=

Middle Initial 163=

Name: Last 161=

First 162=

Middle Initial 163=

WS-144

WELL CONSTRUCTION DATA (1)

R = 58 * T = A D M * Entry No 59 # * Date of Construction Completion 60 = / / * Source of ① 64 = *

Name of Contractor/Driller 63 = * (5185)

Method of Construction 65 = A B C D H J P R T V W Z *
 air, rotary, bored, or augured, cable, tool, dug, hydraulic, rotary, jetted, air-per., cushion, reverse, rotary, trenching, drilled, drive, wash, other

Finish 66 = C E G H B P S T W X Z * Type of Seal 67 = B C G Z *
 porous, concrete, gravel w. part, gravel, screen, horizontal, gallery, open, end, perforated, or slotted, screen, sand point, walled, open, other hole, bentonite, clay, cement, other grout

Bottom of Seal 68 = * Method of Development 69 = A B C J N P S Z * Number of Hours in Development 70 = *
 air-lift, bailed, compressed, jetted, none, other, surged, other pump

Special Treatment During Development 71 = C D E F H M Z *
 chemicals, dry ice, explosives, deflocculant, hydrofracturing, mechanical, other

DIMENSIONS OF THE HOLE CONSTRUCTED (2)

R = 72 * T = A D M * Construction Entry No 59 # *

New Card for Each Hole Segment
 Same R, T & Field 59

Top of Hole Segment Below LSD 73 # * Bottom of Hole Segment below LSD 74 = * Diameter of Hole Segment 75 = *
 73 # * 74 = * 75 = *
 73 # * 74 = * 75 = *
 73 # * 74 = * 75 = *
 73 # * 74 = * 75 = *

CASING SCHEDULE (2)

R = 76 * T = A D M * Construction Entry No 59 # *

New Card for Each Casing With Same R, T & Field 59

Top of Casing Segment Below LSD 77 # * Bottom of Casing Segment Below LSD 78 = * Diameter of Casing Segment 79 # * Casing Material ⑤ 80 = * Thickness of Casing 81 = *
 77 # * 78 = * 79 # * 80 = * 81 = *
 77 # * 78 = (5173) * 79 # (5163) * 80 = * 81 = *
 77 # * 78 = * 79 # * 80 = * 81 = *
 77 # * 78 = * 79 # * 80 = * 81 = *

OPENINGS SCHEDULE (2)

R = 82 * T = A D M * Construction Entry No 59 # *

New Card for Each Open Section With Same R, T and Field 59

Top of Section Below LSD 83 # * Bottom of Section Below LSD 84 = * (Openings Data) 83 # * 84 = *
 Type of Openings ⑥ 85 = * 85 = *
 Type of Material ⑦ 86 = * 86 = *
 Diameter of Open Section 87 = * 87 = *
 Width of Opening 88 = * 88 = *
 Length of Opening 89 = * 89 = *

FOOT NOTES:

① Source of Data Codes:

S D B A R L G Z
 reporting, driller, owner, other gov't, other logs, geologist, other agency, reported,

⑤ Casing Material Codes

B C G I M P R S T U W Z
 brick, concrete, galv., wrought, other, PVC or rock or, steel, tile, coated, wood, other iron, iron, metal, plastic, stone, steel, steel

⑥ Type of Openings Codes

F L M P R S T W X Z
 fracture, lowered, mesh, perforated, wire screen, sand, walled, open, other shuttered, or slotted wound (unknown) point hole

⑦ Type of Material Codes for Open Section

B C G I M P R S T Z
 brass or, concrete, galv., wrought, w. PVC or, stainless, steel, tile, other bronze, iron, iron, plastic, steel

(5315) +
(5316)
(5176)
(5170)
(5176)

PRODUCTION DATA (1)

R= 134 148 * T= A D M * Entry No 147 # * Date 148 # / / *
Source of Data 151 # *
Method of Measurement 152 # S C E F M O P R T U V W Z *
Production Level 153 # * State Level 154 # * Source of Data 155 # * Specific Capacity 272 # *
Method of Measurement 156 # A C E G H L M R S T V Z * Pumping Period 157 # *

(5145)

GI-2
3 of 4

(5102)

(5135)

LIFT DATA (1)

R= 42 * T= A D M * Type of Lift 43 # A B C J P R S T U Z * Entry No 254 # *
Pump Intake Setting 44 # * Type of Power 45 # D E G H L N W Z *
Date 38 # / / * Horsepower 46 # *

(5182)

(5183)

MAJOR PUMP DATA (2)

R= 47 * T= A D M * Type of Lift 43 # * Lift Entry No 254 # * Manufacturer of Pump 48 # *
Serial No of Pump 49 # * Name of Power Company 50 # *
Power Company Account No 51 # * Power Meter No 52 # * Pump Rating 53 # *
Person or Company Who Maintains the Pump 54 # * Additional Lift 255 # * Rated Pump Capacity 256 # *

STANDBY POWER DATA (2)

R= 55 * T= A D M * Type of Lift 43 # * Type of Power 56 # * Horsepower 57 # * Lift Entry No 254 # *

AVAILABLE LOG DATA (1)

R= 198 * T= A D M *
Type of Log 199 # *
Begin Depth 200 # * End Depth 201 # * Source of Data 202 # *

(5160)

WATER QUALITY DATA COLLECTION (1)

R= 114 * T= A D M * Begin Year 115 # * End Year 116 # * Source Agency 117 # *
Frequency of Collection 118 # * Network Site 257 # * Type of Analysis 120 # *

(5157)

WATER LEVEL DATA COLLECTION (1)

R= 121 # T= A D M * Begin Year 122 # * End Year 123 # * Source Agency 124 # *
Frequency of Collection 125 # * Network Site 258 # *

WATER PUMPAGE/WITHDRAWAL DATA COLLECTION (1)

R= 127 # T= A D M * Begin Year 128 # * End Year 129 # * Source Agency 130 # *
Frequency of Collection 131 # * Network Site 259 # * Method of Collection 133 # C E M Z *

OTHER DATA AVAILABLE (1)

R= 180 # T= A D M * Type of Data 181 # * Loc 182 # C D Z * Format 261 # F M P Z *
New Card Same R & T Type of Data 181 # * Loc 182 # C D Z * Format 261 # F M P Z *

FOOT NOTES:

① Source of Data Codes:

S D S A R L G Z
reporting, driller, owner, other gov't, other logs, geologist, other agency reported

② Type of Log Codes

A B C D E F G H I J K L M N S P Q
time, center, edge, driller's, electric, fluid, geologist, magnetic, induction, gamma, dipmeter, logging, microlog, neutron, p. test, photo, radio- active
S T U V Z
tank, temp, gpm, field, other gamma velocity

③ Frequency of Collection Codes

A B C D F I M S Q S W Z
annual, bi-monthly, continuous, daily, semi, intermittent, monthly, one time, quarter, semi, weekly, other monthly only annual annual

④ Type of Quality Analysis Codes

A B C D E F G H J K L M Z
chemical, common, trace, potential, nutrients, sanitary, water, metal, solids, gases, oil or other chemical, physical, biological, B&G B&E B&F B&G C,D&E metal

GEOHYDROLOGIC UNIT DESCRIPTIONS (1)

(5190)

R=90 * T= A D M * Entry No 256 # * Depth to Top 91 = * Depth to Bottom 92 = *

(5104) Unit Identifier 93 = * (5188) Lithology 96 = * Lithologic Modifier 97 = * (5189)

AQUIFER DATA (2)

R=94 * T= A D M * Geohydrologic Unit Entry No 256 # *
Date 95 # / / * Water Level 126 = * % Water Contributed 132 = *

GEOHYDROLOGIC UNIT DESCRIPTIONS (1)

R=90 * T= A D M * Entry No 256 # * Depth to Top 91 = * Depth to Bottom 92 = *

Unit Identifier 93 = * Lithology 96 = * Lithologic Modifier 97 = *

AQUIFER DATA (2)

R=94 * T= A D M * Geohydrologic Unit Entry No 256 # *
Date 95 # / / * Water Level 126 = * % Water Contributed 132 = *

(6954) PERTINENT REMARKS

R=183 * T= A * 185 = *
New Card Same R&T 185 = *
185 = *

NOTES:

VALUE OF UPDATE: 60 days per year inclusive for all Bureau offices.

ARCHIVING REQUIREMENTS: When updated, move old data to archive, and record new data.

ACCESS LIMITATIONS: To be determined.

SPECIAL EDIT/AUDIT/VALIDATION REQUIREMENTS: To be developed.

REMARKS: None.

Prog. Area: Watershed-Geol.
Prep. By: G. Lipscomb
Date: 22 June 78
(Revision)

GI-4

DATA SOURCE DESCRIPTION
(DATA BASE MAINTENANCE)

TITLE/DESIGNATION: Geologic Hazard Map

FORM: A field map.

DESCRIPTION: A field map with legend displaying boundaries of areas with geologic hazards for a planning area.

PREPARATION RESPONSIBILITY: Geologist at Resource Area HQ, DO, or SO.

FORMAT: See attached sample input.

DATA ENTRY PROCEDURE: To be determined.

FREQUENCY OF UPDATE: Each 10 years as new data is collected.

VOLUME OF UPDATE: 60 maps per year inclusive for all Bureau offices.

ARCHIVING REQUIREMENTS: When updated, move old data to archives, and record new data.

ACCESS LIMITATIONS: To be determined.

SPECIAL EDIT/AUDIT/VALIDATION REQUIREMENTS: To be developed.

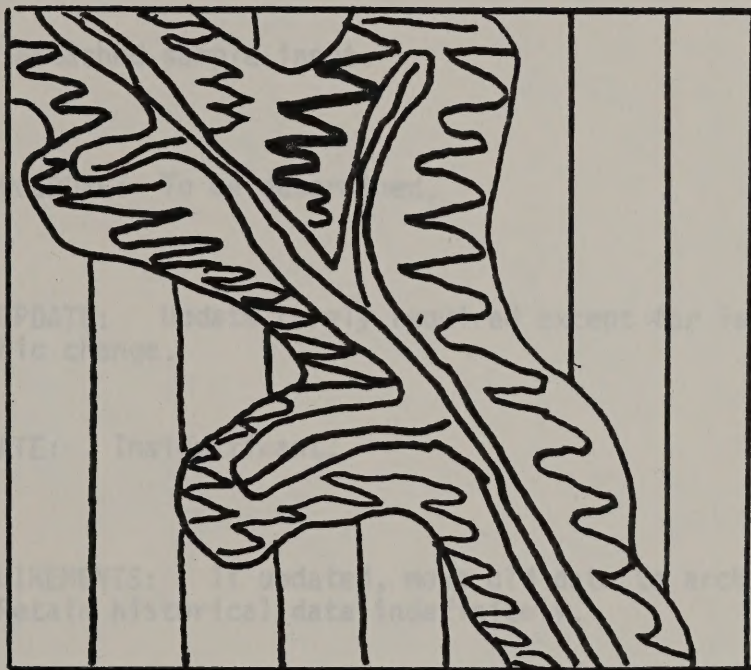
REMARKS: None.

GI-4

GEOLOGIC HAZARD MAP

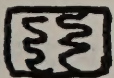
State (0004) (0690)
District (0543)
P. U. (1075)

Date: (2302) (2306)

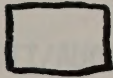


P.U. Boundary

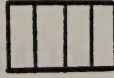
Legend



Landslide
Susceptibility



Flood
Susceptibility



No Landslide/Flood
Susceptibility

(5129)

TOPOGRAPHIC MAP
(5152) (5337)
Prog. Area: Watershed-Geol.
Prep. By: G. Lipscomb
Date: 22 June 78
(Revision)

GI-7

DATA SOURCE DESCRIPTION
(DATA BASE MAINTENANCE)

TITLE/DESIGNATION: Topographic Map

FORM: A field map.

DESCRIPTION: An overlay with annotations/legend displaying lines of equal land surface elevation for a planning area (URA Step 2).

PREPARATION RESPONSIBILITY: Geologist, Geomorphologist, or Planner at Resource Area HQ or DO.

FORMAT: See attached sample input.

DATA ENTRY PROCEDURE: To be determined.

FREQUENCY OF UPDATE: Update rarely required except for isolated areas subject to topographic change.

VOLUME OF UPDATE: Insignificant.

ARCHIVING REQUIREMENTS: If updated, move old data to archives, and record new data. Retain historical data indefinitely.

ACCESS LIMITATIONS: To be determined.

SPECIAL EDIT/AUDIT/VALIDATION REQUIREMENTS: To be developed.

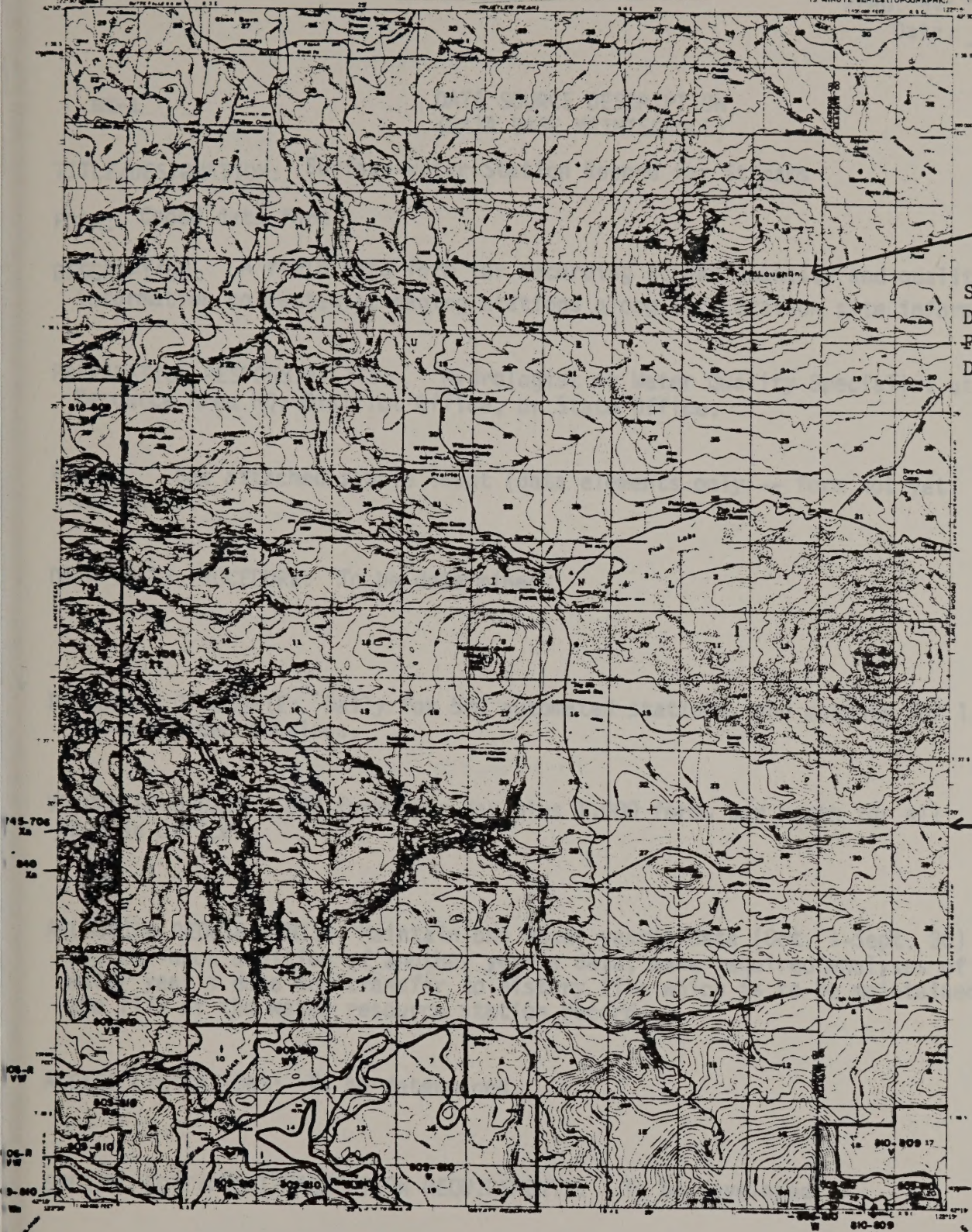
REMARKS: Data for this input may be acquired from US Geological Survey.

TOPOGRAPHIC MAP
(5168) (5331)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

MT MC LOUGHLIN QUADRANGLE
OREGON
15 MINUTE SERIES (TOPOGRAPHIC)

GI-7



(5198)

State (0004) (0690)
District (0543)
Planning Unit (1075)
Date (2302) (2306)

Boundary of
P. U.

Prog. Area: Watershed-Water

Prep. By: G. Lipscomb

Date: 22 June 78

(Revision)

WI-1

DATA SOURCE DESCRIPTION
(DATA BASE MAINTENANCE)

TITLE/DESIGNATION: Surface-Water Station Record for Streams

FORM: Coded data form

DESCRIPTION: A field data form for recording stream quantity and quality information collected at gaging stations along with station site information.

PREPARATION RESPONSIBILITY: Hydrologist or Water Quality Specialist at Resource Area HQ, District Office, or State Office.

FORMAT: See attached sample input (data elements only -- form not yet designed).

DATA ENTRY PROCEDURE: To be determined.

FREQUENCY OF UPDATE: Daily for 500 automated stations, and monthly for 1,000 non-automated stations.

VOLUME OF UPDATE: 500 forms per day plus 1,000 forms per month for all Bureau offices.

ARCHIVING REQUIREMENTS: Maintain one water year's data (Oct. 1-Sept. 30) in system--upon addition of another year's data, make required analyses of previous water year's data and transfer to history file which is to be maintained for the life of the water resource station record.

ACCESS LIMITATIONS: To be determined.

SPECIAL EDIT/AUDIT/VALIDATION REQUIREMENTS: To be developed.

REMARKS: None

WS-152

SURFACE-WATER STATION RECORD FOR STREAMS

Data Elements

1. State, Administrative or State, Geographic	(100-0004) (100-0690)
2. District, Administrative	(100-0543)
3. Area, Resource	(100-0418)
4. Planning Unit	(100-1075)
5. County, ETC	(100-0546)
6. Latitude	(127-1236)
7. Longitude	(127-1237)
8. Meridian	(127-1703)
9. Township	(127-1695)
10. Range	(127-1699)
11. Section	(127-2506)
12. Legal Subdivision, Aliquot-part	(127-2904)
13. Code, Watershed	(145-5304)
14. Number, Station Type	(145-5303)
15. Name, Water Resource Station	(145-5302)
16. Parameter, Water Resource	(145-5316)
17. Value, Water Resource Parameter	(145-5315)
18. Date Recorded	(100-8518)
19. Time	(100-6926)
20. Time Interval for Measurement	(143-4925)
21. Method, Measurement	(100-5311)

WI-1

2 of 2

- | | |
|---------------------------------------|------------|
| 22. Method Code, Water Quality | (145-5319) |
| 23. Code, Pollution Source | (145-5320) |
| 24. Elevation | (100-0431) |
| 25. Acres, Watershed Drainage Area | (145-5321) |
| 26. Comments, Miscellaneous | (100-6954) |
| 27. Ownership, Water Resource Station | (145-5485) |

DESCRIPTION: A field data form for recording lake/reservoir quantity and quality information collected at gaging stations along with station site information.

PREPARATION RESPONSIBILITY: Hydrologist or Water Quality Specialist at Resource Area HQ, DO, or SO.

FORMAT: See attached sample input (data elements only)--form not yet designed.

DATA ENTRY PROCEDURE: To be determined.

FREQUENCY OF UPDATE: Daily for 250 automated stations.

VOLUME OF UPDATE: 250 forms per day plus 500 forms per month for all Bureau offices.

ARCHIVING REQUIREMENTS: Maintain one water year's data (Oct. 1-April 30) in system--upon addition of another year's data, make required analyses of file which is to be maintained for the life of the water resource station record.

ACCESS LIMITATIONS: To be determined.

SPECIAL EDIT/AUDIT/VALIDATION REQUIREMENTS: To be developed.

REMARKS: None.

WS-154

Prog. Area: Watershed-Water

Prep. By: G. Lipscomb

Date: 22 June 78

(Revision)

WI-3

DATA SOURCE DESCRIPTION
(DATA BASE MAINTENANCE)

TITLE/DESIGNATION: Surface-Water Station Record for Lakes/Reservoirs

FORM: Coded Data Form.

DESCRIPTION: A field data form for recording lake/reservoir quantity and quality information collected at gaging stations along with station site information.

PREPARATION RESPONSIBILITY: Hydrologist or Water Quality Specialist at Resource Area HQ, DO, or SO.

FORMAT: See attached sample input (data elements only--form not yet designed).

DATA ENTRY PROCEDURE: To be determined .

FREQUENCY OF UPDATE: Daily for 250 automated stations.

VOLUME OF UPDATE: 250 forms per day plus 500 forms per month for all Bureau offices.

ARCHIVING REQUIREMENTS: Maintain one water year's data (Oct. 1-Sept. 30) in system--upon addition of another year's data, make required analyses of file which is to be maintained for the life of the water resource station record.

ACCESS LIMITATIONS: To be determined.

SPECIAL EDIT/AUDIT/VALIDATION REQUIREMENTS: To be developed.

REMARKS: None.

SURFACE-WATER STATION RECORD FOR LAKES/RESERVOIRS

Data Elements

1. State, Administrative or State, Geographic	(100-0004) (100-0690)
2. District, Administrative	(100-0543)
3. Area, Resource	(100-0418)
4. Planning Unit	(100-1075)
5. County, ETC	(100-0546)
6. Latitude	(127-1236)
7. Longitude	(127-1237)
8. Meridian	(127-1703)
9. Township	(127-1695)
10. Range	(127-1699)
11. Section	(127-2506)
12. Legal Subdivision, Aliquot-part	(127-2904)
13. Code, Watershed	(145-5304)
14. Number, Station Type	(145-5303)
15. Name, Water Resource Station	(145-5302)
16. Parameter, Water Resource	(145-5316)
17. Value, Water Resource Parameter	(145-5315)
18. Date Recorded	(100-8518)
19. Time	(100-6926)
20. Time Interval for Measurement	(143-4925)

21. Method, Measurement (100-5311)
22. Method Code, Water Quality (145-5319)
23. Code, Pollution Source (145-5320)
24. Elevation (100-0431)
25. Acres, Watershed Drainage Area (145-5321)
26. Water type, Lake and Reservoir Survey (161-6935)
27. Comments, Miscellaneous (100-6954)
28. Ownership, Water Resource Station (145-5485)

PREPARATION RESPONSIBILITY: Hydrologist or Engineer at Resource Area HQ, OO, or SO.

FORMAT: See attached sample input.

DATA ENTRY PROCEDURE: To be determined.

FREQUENCY OF UPDATE: Each 2 years as additional channel/stream data is compiled through inventories and surveys.

VOLUME OF UPDATE: 500 maps per year inclusive for all Bureau offices.

ARCHIVING REQUIREMENTS: When updated, move old map data to archives, and record new map information.

ACCESS LIMITATIONS: To be determined

SPECIAL EDIT/AUDIT/VALIDATION REQUIREMENTS: To be developed

REMARKS: None

WS-157

Watershed-Water
Prog. Area: _____

Prep. By: G. Lipscomb

Date: 22 June 78

(Revision)

WI-8

DATA SOURCE DESCRIPTION
(DATA BASE MAINTENANCE)

TITLE/DESIGNATION: Channel and Stream Information Map

FORM: A field map

DESCRIPTION: A map with annotations and legend delineating watershed boundary and drainage network, stream order numbers, stream cross-section locations, and stream reaches.

PREPARATION RESPONSIBILITY: Hydrologist or Engineer at Resource Area HQ, DO, or SO.

FORMAT: See attached sample input.

DATA ENTRY PROCEDURE: To be determined.

FREQUENCY OF UPDATE: Each 2 years as additional channel/stream data is compiled through inventories and surveys.

VOLUME OF UPDATE: 500 maps per year inclusive for all Bureau offices.

ARCHIVING REQUIREMENTS: When updated, move old map data to archives, and record new map information.

ACCESS LIMITATIONS: To be determined

SPECIAL EDIT/AUDIT/VALIDATION REQUIREMENTS: To be developed

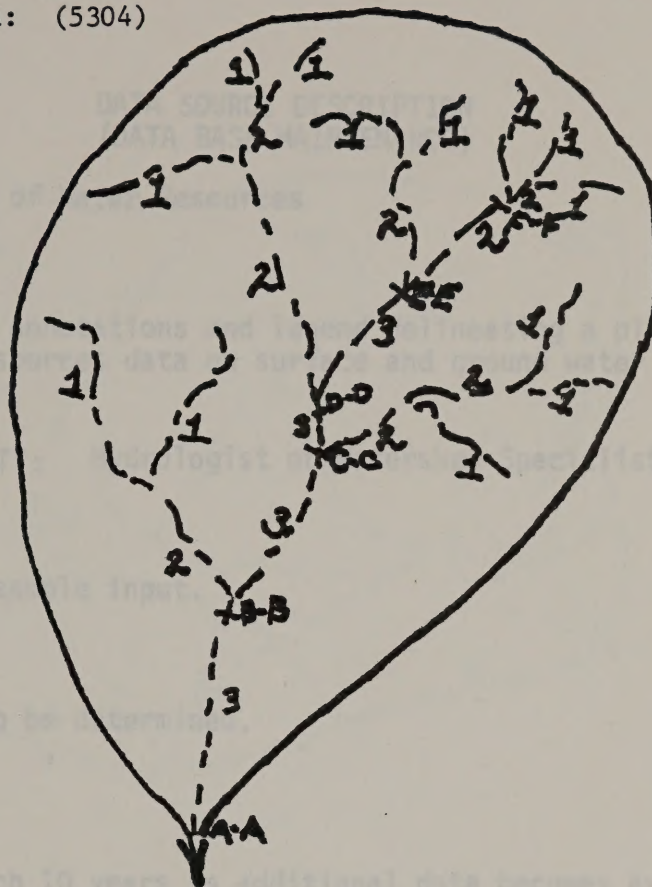
REMARKS: None

CHANNEL AND STREAM INFORMATION MAP

WI-8

State: (0004) (0690)
District: (0543)
Watershed: (5304)

Date: (2302) (2306)



Legend

- | | | |
|---------|--------|---|
| ---1--- | (5335) | Stream of first order |
| ---2--- | | Stream of second order |
| ---3--- | | Stream of third order |
| A-A | (5347) | Cross-section of stream at mouth of basin |
| A-B | (5351) | Reach of Stream between A-A and B-B |
| — | | Basin boundary |
| → | | Direction of flow |

Watershed-Water

Prog. Area:

Prep. By: G. Lipscomb

Date: 22 June 78

(Revision)

WI-10

DATA SOURCE DESCRIPTION
(DATA BASE MAINTENANCE)

TITLE/DESIGNATION: Map of Water Resources

FORM: A field map

DESCRIPTION: A map with annotations and legend delineating a planning area together with water resources data on surface and ground water (URA Step 2).

PREPARATION RESPONSIBILITY: Hydrologist or Watershed Specialist at Resource Area HQ or DO.

FORMAT: See attached sample input.

DATA ENTRY PROCEDURE: To be determined.

FREQUENCY OF UPDATE: Each 10 years as additional data becomes available for URA/MFP update.

VOLUME OF UPDATE: 60 maps per year for all Bureau offices

ARCHIVING REQUIREMENTS: When updated, move old map data to archives, and record new map information. Retain historical data indefinitely.

ACCESS LIMITATIONS: To be determined.

SPECIAL EDIT/AUDIT/VALIDATION REQUIREMENTS: To be developed.

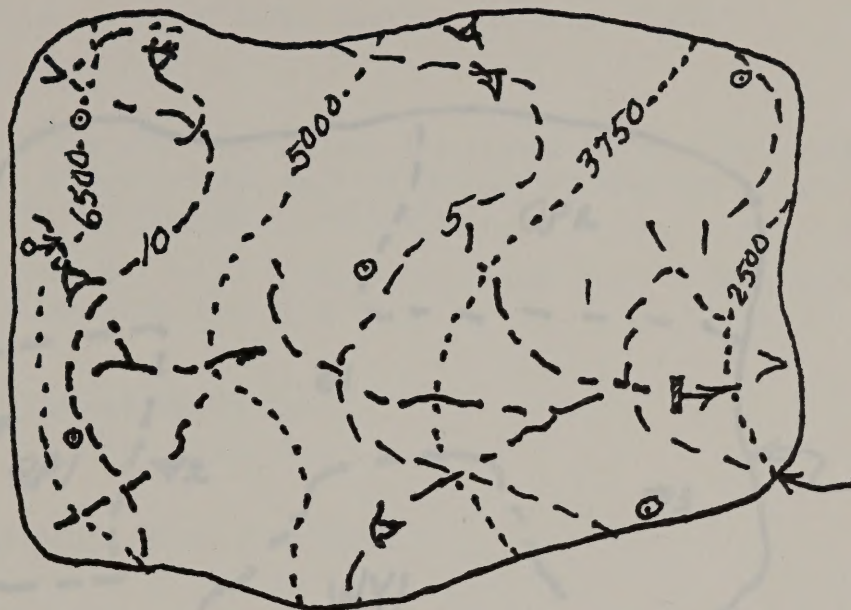
REMARKS: None.

WS-160

MAP OF WATER RESOURCES

State: (0004) (0690)
 District: (0543)
 P. U.: (1075)
 Basin: (5304)

Date: (2302) (2306)



boundary of P. U.

Legend

Stream

○

Well (5149)

⌋

Reservoir (5464) (5463)

⌋

Detention Dam

⌋

Spring (5149)

-5-

Average Annual Runoff (inches) (5417)

--- 2500 ---

Ground-Water Level (feet above MSL)

MAP OF WATER QUALITY AND WATER YIELD

State: (0004) (0690)

District: (0543)

P. U. : (1075)

Date: (2302) (2306)

Proj. Area: _____
 Prep. By: S. L. Lister
 Date: 12 June 78

(Continued)

DATA SOURCE DESCRIPTION
 (DATA BASE MAINTENANCE)

TITLE/DESIGNATION: Map of Water Quality and Water Yield

FORM: A Field map.

DESCRIPTION: Map with legend showing boundaries of water quality problem areas, quality monitoring stations, and significant water yield areas (QPA Step 1, Map 100).

PREPARATION RESPONSIBILITY: Hydro. Dist. Water Quality Specialist or Watershed Specialist at Resource Area HQ or

FIGURE: Attached single sheet.

DATA ENTRY PROCEDURE: To be determined.

FREQUENCY OF UPDATE: Map is new inventory data becomes available.

Legend

- | | | |
|-----|---------------|--|
| ▼ 1 | | Water quality monitoring station No. 1 (Stream) |
| ● 1 | (5303) (5302) | Water quality monitoring station No. 1 (Well) |
| QPI | | Water quality problem area (sediment from area with poor ground cover) |
| QP2 | (5304) | Water quality problem area (sediment from area with poor ground cover) |
| WY1 | | Significant water yield area (municipal water supply) |

ACCESS LIMITATIONS: To be determined.

SPECIAL EDIT/ACQIT/VALIDATION REQUIREMENTS: To be developed.

REMARKS: None.

Watershed-Water
Prog. Area: _____
Prep. By: G. Lipscomb
Date: 22 June 78

(Revision)

WI-11

DATA SOURCE DESCRIPTION
(DATA BASE MAINTENANCE)

TITLE/DESIGNATION: Map of Water Quality and Water Yield

FORM: A field map.

DESCRIPTION: A map with annotations and legend delineating boundaries of water quality problem areas, quality monitoring stations, and significant water yield areas (URA Step 3, Watershed).

PREPARATION RESPONSIBILITY: Hydrologist, Water Quality Specialist or Watershed Specialist at Resource Area HQ or DO.

FORMAT: See attached sample input.

DATA ENTRY PROCEDURE: To be determined.

FREQUENCY OF UPDATE: Each 10 years as new inventory data becomes available for URA/MFP update.

VOLUME OF UPDATE: 60 maps per year for all Bureau offices.

ARCHIVING REQUIREMENTS: When updated, move old map data to archives and record new data. Retain historical data indefinitely.

ACCESS LIMITATIONS: To be determined.

SPECIAL EDIT/AUDIT/VALIDATION REQUIREMENTS: To be developed.

REMARKS: None.

Watershed-Water
Prog. Area:
Prep. By: G. Lipscomb
Date: 22 June 78
(Revision)

WI-12

DATA SOURCE DESCRIPTION
(DATA BASE MAINTENANCE)

TITLE/DESIGNATION: Map of Flood and Sediment Damage

FORM: A field map.

DESCRIPTION: A map with annotations and legend delineating boundaries of flood and sediment source and damage areas (URA Step 3, Watershed).

PREPARATION RESPONSIBILITY: Hydrologist or Watershed Specialist at Resource Area HQ or DO.

FORMAT: See attached sample input.

DATA ENTRY PROCEDURE: To be determined.

FREQUENCY OF UPDATE: Each 10 years as new inventory data becomes available for URA/MFP update.

VOLUME OF UPDATE: 60 maps per year for all Bureau offices.

ARCHIVING REQUIREMENTS: When updated, move old map data to archives and record new data. Retain historical data indefinitely.

ACCESS LIMITATIONS: To be determined.

SPECIAL EDIT/AUDIT/VALIDATION REQUIREMENTS: To be developed.

REMARKS: None.

WS-164

MAP OF FLOOD AND SEDIMENT DAMAGE

WS-20

(DATA BASE MAINTENANCE)

State: (0004) (0690) Date: (2302) (2306)
District: (0543)
P. U. : (1075)

DESCRIPTION: A form for recording water development project data for a planning area (URA 2).

PREPARATION RESPONSIBILITY: Hydrologist, Watershed Specialist or Planner
at Resource Area HQ or DO.

POINT: See map for input.

DATA ENTRY PROCEDURE: To be determined.

FREQUENCY OF USE: Each 10 years as US/MS updates are completed.

VOLUME OF USE: Forms our year for all Bureau offices.

ARCHIVING REQUIREMENTS: Replace old data with new. Do not retain historical data.

Legend

DDA1

Damage area No. 1, developed

UDA2

(5471)

Damage area no. 2 undeveloped

SA1

Source area for DDA1

SA2

Source area for UDA2

REMARKS: None.

WS-166

Prog. Area: Watershed-Water
Prep. By: G. Lipscomb
Date: 22 June 78
(Revision)

WI-20

DATA SOURCE DESCRIPTION
(DATA BASE MAINTENANCE)

TITLE/DESIGNATION: Table of Water Developments by Resource Activity

FORM: URA data form

DESCRIPTION: A form for recording water development project data for a planning area (URA 2).

PREPARATION RESPONSIBILITY: Hydrologist, Watershed Specialist or Planner at Resource Area HQ or DO.

FORMAT: See attached sample input.

DATA ENTRY PROCEDURE: To be determined.

FREQUENCY OF UPDATE: Each 10 years as URA/MFP updates are completed.

VOLUME OF UPDATE: 60 forms per year for all Bureau offices

ARCHIVING REQUIREMENTS: Upon update, replace old data with new. Do not retain historical data.

ACCESS LIMITATIONS: To be determined.

SPECIAL EDIT/AUDIT/VALIDATION REQUIREMENTS: To be developed.

REMARKS: None.

state (0004)(01090)-Water Developments by Resource Activity

(2302)

Date 8/17/74 (2306)

[illegible]

Prog. Area: Watershed-Water

Prep. By: G. Lipscomb

Date: 22 June 78

(Revision)

WI-21

DATA SOURCE DESCRIPTION
(DATA BASE MAINTENANCE)

TITLE/DESIGNATION: Table of Significant Water Yield Areas

FORM: URA data form.

DESCRIPTION: A form for recording water yield data for a planning area
(URA 3, Watershed).

PREPARATION RESPONSIBILITY: Hydrologist or Watershed Specialist at Resource
Area HQ or DO.

FORMAT: See attached sample input.

DATA ENTRY PROCEDURE: To be determined.

FREQUENCY OF UPDATE: Each 10 years as URA/MFP updates are completed.

VOLUME OF UPDATE: 60 forms per year for all Bureau offices.

ARCHIVING REQUIREMENTS: Upon update, replace old data with new. Do not retain
historical data.

ACCESS LIMITATIONS: To be determined.

SPECIAL EDIT/AUDIT/VALIDATION REQUIREMENTS: To be developed.

REMARKS: None.

TABLE OF SIGNIFICANT WATER YIELD AREAS

State (0004) (0690)

Date (2302) (2306)

District (0543)

P.U. (1075)

Watershed Name	Map Key	Acres		Mean Annual Runoff (AC/FT)	Mean Annual Water yield (AC/FT)
		BLM	Other		
(5416)	(5304)	(6594)	(6597)	(5417)	(5419)

MS-169

FLOOD and SEDIMENT DAMAGE TABLE

State (0004) (0690)
 District (0543)
 P.U. (1075)

Date: (2302) (2306)

Damage Area	Acres	Type of Damage	Estimated Annual Damage
(5471)	(5472)	(5473)	(5474)

Prog. Area: Watershed-Water

Prep. By: G. Lipscomb

Date: 22 June 78

(Revision)

WI-22

DATA SOURCE DESCRIPTION
(DATA BASE MAINTENANCE)

TITLE/DESIGNATION: Flood and Sediment Damage Table

FORM: URA data form

DESCRIPTION: A form for recording flood and sediment damage data for a planning area (URA 3, Watershed).

PREPARATION RESPONSIBILITY: Hydrologist or Watershed Specialist at Resource Area HQ or DO.

FORMAT: See attached sample input.

DATA ENTRY PROCEDURE: To be determined.

FREQUENCY OF UPDATE: Each 10 years as URA/MFP updates are completed.

VOLUME OF UPDATE: 60 forms per year for all Bureau offices.

ARCHIVING REQUIREMENTS: Upon update, replace old data with new. Do not retain historical data.

ACCESS LIMITATIONS: To be determined.

SPECIAL EDIT/AUDIT/VALIDATION REQUIREMENTS: To be developed.

REMARKS: None.

WS-170

Prog. Area: Watershed-Water

Prep. By: G. Lipscomb

Date: 22 June 78

(Revision)

WI-24

DATA SOURCE DESCRIPTION
(INITIAL DATA BASE GENERATION)

TITLE OF SOURCE: WATSTORE Files (5) of U.S. Geological Survey (USGS)

FORM: Cards/Magnetic Tape

DESCRIPTION: Consists of water quantity and quality data for both surface and ground water maintained by Geological Survey.

CUSTODIAN: AGENCY: U.S. Geological Survey PERSON: Linda Saindon PHONE: 303-234-2404

LOCATION: USGS National Center, Reston, Virginia

DATA FORMAT: Unknown at this time -- to be determined.

OVERALL DATA VALIDITY: Data has been collected and screened by Geological Survey from over 100,000 sites operated by USGS or their cooperating agencies. All data for stations of interest to BLM would be valid.

OVERALL DATA CURRENCY: Data is current as collected for all stations and valid for BLM needs (for those stations of interest to BLM).

ACCESS/SECURITY LIMITATIONS: Authorization to use WATSTORE must be obtained from Chief Hydrologist, U.S. Geological Survey, National Center, Mail Stop 409, Reston, Virginia, 22092. Access/security limitations are given in the WATSTORE Users Guide (Pages A-6 & A-7 of Chapter I).

ESTIMATED VOLUME: Unknown at the present time -- will require follow-up with USGS.

REMARKS: WATSTORE files include (1) Station Header File, (2) Ground Water Site Inventory File, (3) Water Quality File, (4) Peak Flow File, and (5) Daily Values File.

This recommended source is based on the assumption that BLM's data base will include water quantity/quality data rather than using other agency systems (WATSTORE, STORET, etc.) for storage, analyses and retrieval of BLM Water Data.

Prog. Area: Watershed-Water
Prep. By: G. Lipscomb
Date: 22 June 78

DATA SOURCE DESCRIPTION
(INITIAL DATA BASE GENERATION)

(Revision)

TITLE OF SOURCE: STORET (Storage and Retrieval of Water Quality Data)

FORM: Disk/Tape

DESCRIPTION: A National data base of water quality information for streams, rivers, lakes, and other bodies of water.

CUSTODIAN: AGENCY: Environmental Protection Agency (EPA) PERSON: Thomas Entzminger PHONE: 303-837-2226

LOCATION: EPA Computer Service (Physical Location Unknown)

DATA FORMAT: Unknown at this time -- to be determined.

OVERALL DATA VALIDITY: Data has been collected by many agencies and entities and stored in EPA's National Data Base. Data for geographic areas of interest to BLM would be valid for BLM's Data Base. Water quality data for USGS stations is stored in this data base as well as in GS's WATSTORE System.

OVERALL DATA CURRENCY: Data is as current as the policy on submission by the contributing entities permits. For a geographic area of interest to BLM, the entire data base should be of value to the extent of confidence in the quality of the data.

ACCESS/SECURITY LIMITATIONS: Not yet determined -- will require future contacts with EPA.

ESTIMATED VOLUME: Unknown at the present time -- will require followup with EPA.

REMARKS: Only the Water Quality File of STORET is recommended as an initial data base resource.

D. Processing Requirements

1. Models. The requirements for processing related to watershed models have not been identified as yet. High priority outputs will not require the use of models. However, with complete implementation of the Watershed Information System, it is expected that several watershed models will be required. Most of these models would be acquired from other agencies and universities.

2. Statistical Calculations. Of high priority outputs, only a few require statistical calculations. However, it may be expected that a large number of ad hoc outputs will require statistical analysis (e.g., regressions, correlation, etc.) for air, cover and water resources data. With full implementation of the Watershed System, a great deal of statistical analyses will be required.

E. Probable Impacts. The establishment of a data base for the Watershed Program involves inventory data for soils, vegetative cover, climate, air quality, non-mineral geology and water resources. High priority outputs for each subsystem include: Soils - 11; Vegetative Cover - 1; Air Resources - 3; Geology - 5; and Water - 10. Of these types of resource data only soils and vegetative cover are currently included in BLM Manual procedures (Soils - 7312, 1731 and Vegetative Cover - 7322.11, 1731). Initiation of the data base system will require modification of current soil and vegetative cover inventory forms now contained in Manual guidelines. In addition, procedures have to be developed for collection and recordation of climate, air quality, non-mineral geology, and water resource data since none presently exist. Specific impacts by type of data follow:

1. Soils (Subsystem 0141). Present Manual sections (7312.1, .2) cover soil inventory and interpretation procedures. Procedures, forms and reports must have major changes for adaptation to an automated data base. These changes must be made with close coordination of the Soil Conservation Service (SCS). Such coordination is required so that BLM data is compatible with that of SCS, and transfer/exchange of data between the two agencies can be automatically accomplished. To insure such compatibility, both SCS and BLM soils forms have been included in the URD package. Some soils input data will also come from the Soil-Vegetation Inventory Method (1731).

2. Vegetative Cover (Subsystem 0142). The present Manual 7322.11, Watershed Conservation and Development Inventory, contains procedures for collection of watershed cover transect data. This data is currently stored and retrieved through the WC&D, System 0008 which has been proposed for conversion to the information system data base. Future watershed vegetative cover data will come from the Soil-Vegetation Inventory (Manual 1731) and this data will update existing WC&D data currently in System 0008. Bridging this gap will require a major change in the existing system.

3. Air (Subsystem 0143). Currently there are no Manual procedures or developed forms for collecting and recording climate and air quality inventory data. Developing necessary guidelines, forms, etc., for climate and air quality will require a major change in current operations. Coordination with other agencies will be required to permit exchange of air quality and climate data. Agreement between BLM and EPA will be required for the Bureau to use EPA's EROS data storage system (air quality/emission source data) for storage and retrieval of data. An agreement between BLM and NOAA will be necessary for the Bureau to use their National Climatic Center data bank for climatic data.

4. Geology (Subsystem 0144). Implementation of non-mineral geology inventory data requirements will require a major effort. New procedures, forms and reports will require development since Manual guidelines are nonexistent at the present time.

5. Water (Subsystem 0145). At present there are no Manual guidelines (7000) for water resource inventory. Therefore, a major effort will be required for development of new procedures, forms, and reports. Such an effort must be coordinated with Wildlife, Recreation, Range, Forestry, etc. Agreements must be worked out with Geological Survey and EPA for using their systems for storage and retrieval of water data (G.S. - WATSTORE; EPA - STORET).

6. URA. High priority requirements of Steps 2 (Physical Profile), 3 and 4 (Watershed) are included, under the above subsystem so far as inputs and outputs are concerned. Generating outputs required in the present Manual 1605 will require substantial change in forms and reports. Future changes in output requirements for URA (Manual revisions) would result in a need for changes in the user specifications package prior to the design phase.

F. Data Element Dictionary. A data element dictionary which includes all Watershed data elements for high priority inputs/outputs is included as a separate document. A Watershed I/O matrix for cross-referencing data elements to inputs and outputs is also included as a separate document.

3. Air (Subsystem 0143). Currently there are no Manual procedures or developed forms for collecting and recording climate and air quality inventory data. Developing necessary guidelines, forms, etc., for climate and air quality will require a major change in current operations. Coordination with other agencies will be required to permit exchange of air quality and climate data. Agreement between BLM and EPA will be required for the Bureau to use EPA's ER02 data storage system (air quality/emission source data) for storage and retrieval of data. An agreement between BLM and NOAA will be necessary for the Bureau to use their National Climatic Center data bank for climatic data.

4. Geology (Subsystem 0144). Implementation of non-mineral geology inventory data requirements will require a major effort. New procedures, forms and reports will require development since Manual guidelines are nonexistent at the present time.

5. Water (Subsystem 0145). At present there are no Manual guidelines (7000) for water resource inventory. Therefore, a major effort will be required for development of new procedures, forms, and reports. Such an effort must be coordinated with Wildlife, Recreation, Range, Forestry, etc. Agreements must be worked out with Geological Survey and EPA for using their system for storage and retrieval of water data (2.2 - WATERSTORE; EPA - STORET).

6. URA. High priority requirements of Stage 2 (Physical Profile), 3 and 4 (Water-based) are included under the above subsection so far as inputs and outputs are concerned. Generating outputs required in the present Manual 1005 will require substantial change in form and reports. Future changes in output requirements for URA (Manual revisions) would result in a need for changes in the user specifications package prior to the design phase.

7. Data Element Dictionary. A data element dictionary which includes all identified data elements for high priority requirements is included as a separate document. A selected 10 matrix for cross-referencing data elements to inputs and outputs is also included as a separate document.

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